

ANALYSIS OF SUCCESS FACTORS FOR IMPLEMENTATION OF PUBLIC PRIVATE PARTNERSHIPS (PPPs) IN NIGERIA

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ABSTRACT

The traditional methods used to measure project success in the construction industry are 'the iron triangle' of time, cost and quality. These criteria are no longer sufficient as other factors related to project sustainability are being demanded. Sustainable procurement policies require that projects provide social and economic gains to host communities. Construction works procured using public private partnership arrangement (PPPs) are more risk prone than those procured using other forms, primarily due to the lengthy concession period and the multi-parties involved in the arrangement. In Nigeria, researches on the assessment of the performance of projects procured using PPP are few due to the novelty of the approach. Many projects are still at pre-construction and construction stages whilst few are at the operation stage. It is important for the public and private sectors to establish effective risk allocation strategies for public-private partnership (PPP) projects in order to achieve a more efficient process of contract negotiation and reduce the occurrence of dispute during the concession period. Developing countries like Nigeria are in need of infrastructure development and some countries are attempting Public Private Partnerships (PPPs). In Nigeria for example, the Federal government has been trying to find ways of implementing projects funded through PPP arrangements. PPPs are risk sharing investments in the provision of public goods and services, seen by governments as a means to promote investment platforms, which would not have been possible within the available public-sector budget, within reasonable time. However, there is no in-depth analysis of the critical factors that are likely to affect the success of PPP projects in developing countries. The objective of this paper is to address the aforementioned gap and contribute to the knowledge base of success factors for PPP projects in developing countries using Nigeria as a case study. Success factors were identified from literature survey and validated using interviews with the major stakeholders in the construction industry i.e. the contractors representing the private sector, the financial institutions and government departments largely charged with construction of facilities. The various factors were rated using questionnaire surveys. The factors were then ranked using the Coefficient of Variation on the importance of the factors for each of the parties involved. Competitive procurement process, well organized private sector, availability of competent personnel on PPP projects implementation, and good governance are the most important factors identified.

Keywords: Public Private Partnerships, Success Factor, Nigeria

INTRODUCTION

A public-private partnership (PPP) is defined by the National Council for Public-Private Partnerships, USA (2009) as “a contractual agreement between public agencies (federal, state, or local) and a private sector entity.” through which the skills and assets of each sector are shared in delivering a service or facility for the use of the general public. It has been recognized as an effective way of delivering value for money for public infrastructure and services, which seeks to combine the advantages of competitive tendering and flexible negotiation, and to allocate risk on an agreed basis between the public sector and the private sector (Li et al. 2005). However, it is worth highlighting that PPP is not a panacea or a quick fix solution to deliver project financing and realization (European Commission 2003). Developing countries are confronted by greater demands for modern public services and infrastructure and the need to make the economy investor-friendly. Initiatives to bring the private sector skills and finances into provision of public services and critical infrastructure are evolving. This paper focuses on Nigeria as an example of developing countries, where hospitals, schools, roads, power plants and other infrastructure are funded by the private sector. The search for an alternative method of funding is caused by the relative decline in earnings from oil and the lack of requisite expertise in the public sector. Although the government has recognized that carefully structured partnerships between the public and the private sector is central to its aim of achieving a first class public services and infrastructure development for economic growth, it was discovered that the process is still conducted in an unregulated and unstructured manner. The multi objectives of PPPs (Bing *et al.*, 2004), including promoting infrastructure development, developing local economy, reducing costs, increasing construction and operation efficiencies, and improving service quality by incorporating the private sector’s knowledge, expertise and capital have drawn increasing interest from policy makers, researchers and the industry practitioners. According to Gruneberg *et al.*,(2007), Governments believe that PPP procurement can provide a wide variety of net benefits for society, including: enhanced government capacity; innovation in delivering public services; reduction in the cost and time of project implementation; and transfer of major risk to the private sector, in order to secure value for money for taxpayers.

It has been reported in several studies that the construction industry performance in Nigeria is poor as the industry is characterized by repeated delays, cost overruns and incessant building collapse. The poor performance of the industry has attracted the attention of both public and private sector clients. This is of great concern because the industry can no longer cope with the high demand put on it as a result of increased population and shortage of fund to finance much needed infrastructural facilities. Consequently, successive governments are challenged by the need to provide new infrastructure and also to maintain the existing ones as the majority of the facilities are in a state of disrepair. In trying to ameliorate the infrastructure deficit problem, which has greatly constrained the economic growth and development of the country, the present democratic government in Nigeria has envisioned a ‘Seven- Point Agenda’ aimed at improving the quality of life of the people. At the centre of this agenda is the provision of infrastructure which requires massive investment that is beyond the means available to the government. The

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Nigerian government therefore sought to partner with the private sector through Public Private Partnership (PPP) arrangements. This led to the inauguration of the board of the Infrastructure Concession Regulatory Commission (ICRC) by late President Umaru Musa Yar'Adua in 2008. The commission is to serve as a major vehicle in operationalizing the process of private sector participation in infrastructure finance in Nigeria. The Commission is expected to epitomize best practices in Public Private Partnership (PPP), and be a beacon for sub-national entities to take their bearings from (Nigeria first, 2009).

European Investment Bank, (2005) submitted that, PPPs are risk sharing investments in the provision of public goods and services, seen by governments as a means to promote investment platforms, which would not have been possible within the available public-sector budget, within reasonable time. The Canadian Council for PPPs defines PPPs as 'a cooperative venture between the public and private sectors, built on the expertise of each partner that best meets clearly defined public needs through the appropriate allocation of resources, risks and rewards (Grant, 1996). Each of the parties has its own interests to accomplish from this "union for convenience". In developed countries, the involvement of the private sector in the development and financing of public facilities and services has increased substantially over the past decade (Li *et al.*, 2005). For instance, many PPP projects in the United Kingdom and other developed economies are regarded as successful, and the drivers of success have become a subject for investigation (Qiao *et al.*, 2001; Jefferies *et al.*, 2002; Li *et al.*, 2005). However, not much is known about the importance of the critical success factors (CSFs) for successful implementation of PPP projects in developing countries. The objective of this paper is to address the aforesaid gap and contribute to the knowledge base of critical success factors for PPP projects in developing countries using Nigeria as a case study.

LITERATURE REVIEW

In Nigeria, in the 1980s the construction industry alone contributed up to 7% to the Gross Domestic Product (GDP) (NBS, 2008). This significant contribution of the industry to the GDP corroborates the assertion by Walsh and Sawhney (2002) that construction activity is an important contributor to GDP in most industrialized countries and contributes significantly to global economic growth. Although Nigeria has not yet attain the status of an industrialized country the country is aspiring to get there soon. The contribution of the construction sector in industrialized countries like the United State of America (USA) and Australia were, in 1996, around 10.7% (Walsh and Sawhney, 2002) and 6.3% respectively (Croset *al.* 1991). It is evident, therefore, that the industry plays a prominent and significant role in national development. However, by 2002 construction contribution to GDP in Nigeria had been eroded to a mere 1% of the GDP (AFO/OECD, 2004). This has been attributed to high fragmentation of the industry, political instability, poor performance combined with low productivity over the years (Okuwoga, 1998; Adeyemi *et al.*, 2005 cited in Oladapo, 2007). The Nigerian construction industry in the past two or three decades has largely been supported by substantial public spending to fund the construction of basic infrastructure; as evident in the yearly budgetary allocation to capital expenditure. The situation has been changing given the Federal Government's budgetary constraints vis-à-vis the quantum of resources required to rebuild, maintain, upgrade, and expand the country's

critical infrastructure. In trying to ameliorate the infrastructure deficit problem, which has greatly constrained the economic growth and development of the country, the present democratic government in Nigeria has envisioned a 'Seven- Point Agenda' aimed at improving the quality of life of the people. At the centre of this agenda is the provision of infrastructure which requires massive investment that is beyond the means available to the government. Akintoye *et al.* (2003) define PPPs as a long-term contractual arrangement between a public sector agency and a private sector concern, whereby resources and risk are shared for the purpose of developing a public facility. The principal aim of a PPP for the public sector is to achieve value for money in the services provided while ensuring that the private sector entities meet their contractual obligations properly and efficiently (Grimsey and Lewis, 2002). Under PPP, the private sector provides more favourable long term financing options than may be available to a government entity and they secure the financing in a much quicker time frame (The National Council for Public – Private Partnerships (NCP3P), 2003). Such contracts are long-term in nature and typically 25-30 years. According to Mustafa (1999), PPPs addresses the common faults that are associated with public sector procurement such as high construction costs, construction overruns in terms of time and costs, operational inefficiencies, poor design, and community dissatisfaction. One of the key features of the PPP which is appealing to the government is the shift of project risks from the public sector to the consortium involved with the project even though this requires a profit incentive to the project consortium (Grimsey and Lewis, 2002). PPPs are being established as a cost effective method of overcoming costs associated with the provision and maintenance of infrastructure. Duffield (2001) analyzed the benefits of PPPs using the Australian examples of the New Prisons Project in Victoria, New South Wales Schools Project and Sydney's Cross City Tunnel.

According to Yuan *et al.*, (2009) PPPs have multiple objectives including promoting infrastructure development, developing the local economy, reducing costs, increasing construction and operation efficiencies, and improving service quality by incorporating the private sector's knowledge, expertise and capital. When PPP projects were first launched in the UK, the government appeared to view them primarily as a way of getting infrastructure costs off the public balance sheet, keeping investment levels up, cutting public spending and avoiding the constraints of public sector borrowing limits (Li *et al.*, 2005). However, Li *et al.* (2005) argue that the impact of government borrowing is much less significant than at first thought and that PPP is now seen as essentially a new approach to risk allocation in public infrastructure projects. Li (2003) demonstrates that the disadvantages associated with PPP procurement are: a lot of management time spent in the contract transaction, lengthy delays in negotiation and high participation cost. Akintoye *et al.* (2001) discovered that PPP procurement has challenges of high cost of tendering, complex negotiation, cost restraints on innovation, and differing or conflicting objectives among the project stakeholders. According to Her Majesty Treasury (2000), there are different forms of PPPs with the major ones being: asset sales, wider market, sales of business, partnership companies, private finance initiative (PFI), joint ventures, Build Own Operate and Transfer (BOOT), investment partnerships and policy partnerships. The most commonly used PPP model in the UK is

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the PFI (Her Majesty Treasury, 2000). The call for use of PPP in Nigeria seems to be based on the PFI model used in the United Kingdom. PFI is the most successful and prolific form of PPP where the public sector contracts the private sector to provide quality public services on a long-term basis, typically 25-30 years. It takes advantage of private sector infrastructure delivery and service management skills, incentivized by having private finance at risk. The private sector takes the responsibility and risks for designing, financing, enhancing or constructing, maintaining and operating the infrastructure assets to deliver the public service in accordance with the public sector's output specification. The public sector pays for the project through a series of performance or throughput related payments, including service delivery and return on investment. Central Government may provide payment support to the public sector through grants and other financial mechanisms (Her Majesty Treasury, 2000). However, Harback *et al.*, (1994) identified five drawbacks of PPPs as unfulfilled expectations; un-finished business in which some elements of the partnering arrangement are still in dispute; assumption that all parties involved in the partnering are willing to share personal beliefs and thoughts; and adoption of a one-size- fits-all approach to all projects. Despite this, many PPP/PFI projects have registered successes, and the drivers have become a subject for investigation (e.g. Keene, 1998; Qiao *et al.*, 2001; Jefferies *et al.*, 2002).

Table 1: Summary of Critical Success Factors for PPPs Projects

	Success factor	Source
CSF1	Project Technical Feasibility	Qiaoet al. (2001) , Keonget al. (1997)
CSF2	Project Financial Feasibility	Qiaoet al. (2001)
CSF3	Financial Capacity/ Ability of the Parties	Salzmann and Mohamed, (1999)
CSF4	Sound economic policy	Tiong (1996)
CSF5	Stable macro-economic environment	Hardcastleet al., (2006)
CSF6	Well-organized public agency	Qiaoet al. (2001)
CSF7	Well-organized Private sector	Salzmann and Mohamed, (1999)
CSF8	Strong private consortium	Jefferies et al., (2002); Hardcastleet al., 2006)
CSF9	Availability of Competent personnel on PPP project implementation	Duffield (2005)
CSF10	Stakeholders acceptance	Qiaoet al. (2001)
CSF11	Presence of an enabling PPP Policy	Tiong (1996)
CSF12	Favorable policies in respect to lending for PPP construction projects	Jefferies et al., (2002);
CSF13	An enabling environment for local private construction companies to compete favorably and expand compared to the internationals and multinationals	Hardcastleet al., (2006)
CSF14	Positive Attitude towards PPP Project implementation	Tiong (1996)
CSF15	Willingness to support; and freely participate in PPP Project implementation	Duffield (2005)
CSF16	Appropriate risk allocation and risk sharing	Qiaoet al. (2001) ,Grant (1996)
CSF17	Transparency in the procurement process	Qiaoet al. (2001)
CSF18	Competitive procurement process	Jefferies et al., (2002);
CSF19	Commitment of all the parties	Salzmann and Mohamed, (1999)
CSF20	Involvement of all the key parties during project Planning	Jefferies et al., (2002);
CSF21	Thorough and realistic cost/benefit assessment of the projects involved	Qiaoet al. (2001), Akintoyeet al. (2001)
CSF22	A streamlined, transparent and clear project appraisal policy	Qiaoet al. (2001)
CSF23	A strong Monitoring and Evaluation(M&E) system for the projects implemented	Hardcastleet al., (2006)
CSF24	Strong Monitoring and Evaluation Teams for the projects implemented	Hardcastleet al., (2006)
CSF25	Proper recording, archiving and referencing	Hardcastleet al., (2006)
CSF26	Good governance	Duffield (2005)
CSF27	Government involvement by providing guarantees	Wang et al. (1999)
CSF28	Favorable legal framework	Tiong (1996)
CSF29	Willingness to share authority amongst the parties	Salzmann and Mohamed, (1999)
CSF30	Technology transfer	Quiobet al. (2001)
CSF31	General Knowledge about existence and working of PPPs	Quiobet al. (2001)
CSF32	Presence of a pro-investment culture among the population	Quiobet al. (2001)

The challenges have to be overcome to realize the full potential of PPP arrangements. Rockart (1982) defines Success Factors as: 'those few areas of activity in which favourable results are absolutely necessary for a manager to reach his/her goals. The

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Success Factor methodology is a procedure that attempts to make plain the key areas that are essential for the management success (Rockart 1982). Success factors are those fundamental issues inherent in the project, which must be maintained in order for team working to take place in an efficient and effective manner. A review of literature on the factors critical to the success of project procurement under BOOT, PPP or similar concepts has been carried out. Table 1 provides a summary of the key success factors

METHODOLOGY

Questionnaire Design

The research examined the critical success factors for PPP on construction projects in Nigeria's public sector. The study was carried out on the public (government departments) that are charged with construction, the private sector contractors involved in construction and the financing agencies (banks and insurance companies). Success factors were compiled based on a review of the literature. Face to face interviews were held with contractors in the private sector, representatives of government departments working on construction projects, and representatives of financial institutions to verify that indeed the identified factors were important in addressing issues of PPP in building projects. Data were collected through questionnaire survey using quantitative approach. The questionnaire was designed based on the developed list of causes after a pilot study. The piloting was to refined the wordings and increase the reliability of the questions. Closed ended questions were used as they are very convenient for collecting factual data and are simpler to analyze since the range of potential answers are limited (Fellows and Liu, 2003). The respondents were requested to give their opinion on the relative importance of the factors as far as PPPs are concerned using a 5 - point Likert scale (Fellows and Liu, 2003). The ratings were "Not important" =1, "Fairly important" =2, "Important" =3, "Very important" =4, and "Extremely Important" =5. This type of scale has been found to be acceptable in other construction management research. For example, Wang *et al.* (1999) used similar approach to investigate risk criticality in China's BOT projects.

Surveys

Closed questions were mainly used for this research after considering the results of the pilot studies. Research assistants were used to follow up the responses and also to explain terms in the questionnaire were the respondents wanted clarification. The respondents were requested to rank the 32 identified factors with regard to their importance in PPPs. The key stakeholders targeted were the public sector, the private sector and the financial institutions. A total of 50 government institutions and departments were used. Due to the fact that the research was more concerned with construction projects; the private sector covered only Construction Contractors. The survey gathered data from 35 chief executives of large building firms who are involved in PPP. The choice of the large firms was based on the assumption that large and well established firms are more capable of getting involved in PPP projects. It was decided that all those in category A be the source of information. A total of 36 financial institutions including banks and insurance companies were contacted. Commercial banks formed the majority followed by insurance firms. In all, 120 questionnaires were

distributed and 112 were returned. Out of these, 47 responses came from public sector organizations, 32 from the financial institutions and 33 from the private sector. This was considered sufficient since for the case of Public sector and financial institutions the populations could not be accurately established. Responses of more than 30 were more than the minimum ten percent required for descriptive research (Collis and Hussey, 2001). A summary of the response rates is provided in Table 2.

Table 2: Response Rate for the Questionnaire

No.	Party	Number contacted	Number responded	Response to contacted (%)
1	Private sector	35	33	94
2	Public sector	50	47	94
3	Financial Institutions	35	32	91
Total		120	112	93

RESULTS AND DISCUSSION

The analysis of the data was carried out using Statistical Package for Social Scientists (SPSS) 16.0 package. The data collected from the survey were coded and entered into the software that calculated the required statistics including the mean, variance, Coefficient of Variation and Spearman’s coefficient of rank correlation. Also Statistical analysis was undertaken using Cronbach’s alpha to test the reliability for the individual groups of respondents. The Cronbach alpha reliability for the factors was 0.746 suggesting that the data collected for the success factor analysis were reliable (Norusis, 1992). The mean ratings, variances, and coefficients of variation of the data were determined using equations 1, 2 and 3 respectively.

$$E(x) = \sum_{x=0}^n x1p(x1) \quad \dots \quad 1$$

$$V(x) = E(x - \mu)^2 \quad \dots \quad 2$$

$$COV(x) = \frac{\sqrt{V(x)}}{E(x)} \quad \dots \quad 3$$

Where E(x) is the expected value of a discrete random variable X; x the values of the random variable for which p(x)>0; p(x) is the probability distribution; μ is the mean; V(x) is the variance of a random variable X; and COV(x) is the coefficient of variation. The success factors were ranked using their respective COV for each category of respondents. The use of COV in ranking has been done before and is considered more reliable than the mean because it considers both E(x) and V(x) (Al- Shumaimeri, 2001). Table 3 ranks the factors by the perceived importance in PPPs. Correlation analysis was carried out between the ranks of factors under the private and public category, the private and financial institutions and the public and institutions. The analysis was carried out using Spearman’s Correlation coefficient, ρ whereby

$$P = 1 - \frac{6 \sum d^2}{n(n-1)}$$

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d is the difference between the inter-category ranking, n is the number of factors equal to 32. The Spearman's correlation coefficients between the ranks of factors under the private and public category, the private and financial institutions and the public and institutions are 0.32, 0.11 and 0.31 respectively. It can be seen that the rankings by the different categories are positively correlated.

Table 3: Ranking of factors that affects PPPs

No.	FACTOR	Public sector				Private Sector				Financial Sector			
		Mean	SD	COV	Rank	Mean	SD	COV	Rank	Mean	SD	COV	Rank
CSF1	Project Technical Feasibility	3.51	0.98	0.278	25	3.41	0.92	0.268	4	3.17	0.65	0.204	15
CSF2	Project Financial Feasibility	4.20	0.79	0.187	3	4.01	0.92	0.228	1	3.95	0.87	0.219	19
CSF3	Financial Capacity/ Ability of the Parties	3.64	0.90	0.246	18	3.64	1.19	0.325	15	4.04	0.81	0.200	14
CSF4	Sound economic policy	3.82	0.99	0.258	21	2.92	1.26	0.429	31	3.82	0.82	0.214	18
CSF5	Stable macro-economic environment	3.64	1.04	0.284	26	3.32	1.19	0.356	22	2.75	0.76	0.274	30
CSF6	Well-organized public agency	4.54	0.67	0.147	1	3.49	1.01	0.288	6	3.79	0.95	0.249	27
CSF7	Well-organized Private sector	4.04	0.88	0.217	8	3.58	1.12	0.311	10	4.21	0.56	0.132	6
CSF8	Strong private consortium	4.04	1.01	0.249	19	2.75	1.19	0.430	32	3.82	0.82	0.214	17
CSF9	Availability of Competent personnel on PPP project implementation	4.04	0.91	0.224	10	3.49	1.12	0.319	12	3.79	0.75	0.197	11
CSF10	Stakeholders acceptance	3.48	1.02	0.291	28	2.87	1.05	0.363	23	3.72	1.00	0.267	29
CSF11	Presence of an enabling PPP Policy	3.82	0.92	0.240	13	2.69	1.02	0.376	27	4.59	0.50	0.108	2
CSF12	Favorable policies in respect to lending for PPP construction projects	3.32	0.90	0.269	22	3.01	1.25	0.413	30	3.37	0.84	0.248	26
CSF13	An enabling environment for local private construction companies to compete favorably and expand compared to the internationals and multinationals	2.95	0.82	0.276	24	3.58	1.14	0.317	11	4.59	0.50	0.108	3
CSF14	Positive Attitude towards PPP Project implementation	4.04	0.84	0.207	7	3.15	1.07	0.338	19	4.24	0.58	0.136	7
CSF15	Willingness to support; and freely participate in PPP Project implementation	3.67	0.90	0.244	16	3.15	1.10	0.347	21	4.37	0.67	0.153	8
CSF16	Appropriate risk allocation and risk sharing	3.48	0.88	0.251	20	3.52	1.15	0.325	14	3.01	0.75	0.248	25
CSF17	Transparency in the procurement process	3.79	0.93	0.244	17	3.67	1.18	0.320	13	4.04	0.73	0.180	10
CSF18	Competitive procurement process	4.02	0.74	0.184	2	3.84	1.06	0.275	5	4.79	0.40	0.083	1
CSF19	Commitment of all the parties	4.36	0.83	0.189	4	3.81	1.15	0.300	8	2.98	1.15	0.383	32
CSF20	Involvement of all the key parties during project Planning	3.42	1.13	0.328	32	3.58	1.06	0.294	7	3.56	0.85	0.237	23
CSF21	Thorough and realistic cost/benefit assessment of the projects involved	4.17	0.86	0.205	6	3.24	1.20	0.368	24	2.79	0.65	0.231	20
CSF22	A streamlined, transparent and clear project appraisal policy	2.95	0.86	0.290	27	3.01	1.01	0.333	17	4.59	0.56	0.121	5
CSF23	A strong Monitoring and Evaluation(M&E) system for the projects implemented	3.98	0.80	0.200	5	3.49	1.17	0.333	16	4.04	0.63	0.155	9
CSF24	Strong Monitoring and Evaluation Teams for the projects implemented	3.82	0.88	0.229	11	3.58	0.91	0.253	2	3.21	0.76	0.235	22
CSF25	Proper recording, archiving and referencing	3.14	0.77	0.244	15	3.64	1.24	0.339	20	3.53	0.85	0.239	24
CSF26	Good governance	3.64	0.87	0.238	12	3.89	1.01	0.258	3	4.59	0.56	0.121	4
CSF27	Government involvement by providing guarantees	3.82	0.85	0.221	9	3.41	1.29	0.376	26	3.01	0.60	0.198	12
CSF28	Favorable legal framework	3.48	0.95	0.271	23	3.24	1.09	0.334	18	4.01	0.80	0.199	13
CSF29	Willingness to share authority amongst the parties	2.79	0.82	0.292	30	3.24	0.98	0.301	9	2.79	0.95	0.338	31
CSF30	Technology transfer	3.11	0.75	0.240	14	3.09	1.16	0.373	25	3.82	0.82	0.214	16
CSF31	General Knowledge about existence and working of PPPs	3.48	1.02	0.291	29	3.01	1.18	0.389	28	3.59	0.84	0.233	21
CSF32	Presence of a pro-investment culture among the population in the country	2.89	0.86	0.296	31	2.64	1.06	0.398	29	2.95	0.75	0.253	28

From Table 3, it can be seen that the five factors that are of great importance according to the private sector are having: project financial feasibility; strong monitoring and evaluation teams for the projects implemented; good governance; project technical feasibility; and a competitive procurement process.

The five factors that are of great importance to the public sector are: well-organized public agency; competitive procurement process; project financial feasibility; commitment of all the parties; and a strong monitoring and evaluation system for the projects implemented. Jefferies et al. (2002) similarly advanced that a well-organized public sector with a functional procurement system is very crucial in PPP procurements.

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The five factors that are of great importance to the financial sector are: competitive procurement process; presence of an enabling PPP policy; an enabling environment for local private construction companies to compete favorably and expand compared to the internationals and multinationals; good governance; and a streamlined, transparent and clear project appraisal policy. The common factors that are within the first fifteen for each of the categories are: competitive procurement process; well-organized private sector; availability of competent personnel on PPP project implementation; and good governance.

CONCLUSION AND RECOMMENDATIONS

The result of this study presents the factors and their relative importance to the implementation of PPP in Nigeria. These factors are applicable to construction industries in other developing countries. This study can be useful to the stakeholders in different ways. Firstly by the identification and assessment of the factors affecting PPP projects, stakeholders intending to carry out PPP projects can focus their attention and optimize the resources on the real issues. Secondly, by assessing the importance of the factors, stakeholders can prioritize them in addressing the apprehensions. Moreover, the study sets the basis for further analysis of the factors. This will enable those intending to carry out PPP projects in developing countries to get more understandings and better chances of carrying PPP projects successfully. In this way, the construction industries in Nigeria and by extension developing countries will improve their performance.

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