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VALUATION OF CRITICAL SUCCESS FACTORS (CSF) IN PUBLIC-PRIVATE PARTNERSHIP (PPP) ON REMODELLED MARKETS IN NIGERIA

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#### **ABSTRACT**

The study evaluated the critical success factors in public-private partnership (PPP) on remodeled markets in Nigeria with a view to improve the usage of the procurement method in markets remodeling. The study was a descriptive survey, using a semi-structured questionnaire in five sections namely: socio-demographics, rating of critical success factors in relation to markets remodeling, PPP Models relevant for markets remodeling, associated risks and risks allocation in relationship to markets remodeling. A total of 120 questionnaires were administered for the study. Data obtained from experienced developers, consultants and area councils' works department staffs were analysed using descriptive and inferential for the study. The critical success factors identified in

## Introduction:

Infrastructures are physical developments like roads, buildings, bridges, electricity grid, telephone grid, industries, medical educational facilities, facilities, sport facilities, so on, markets and necessary for the smooth operation of a community (Oyedele, 2019). They are procured either with public fund or via public-private partnership (PPP) and enable economy to operate. Both developed economies developing require a new infrastructure because of wear and tear due to long usage and obsolescence. Over the last



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success factors identified in this study were factors at the preliminary qualification evaluation phase, the tendering phase, concession of award phase, the construction phase, operation phase and transfer phase. The analysis of variance of these factors to the level of usage of PPP model shows a significant impact of 89.5%. Design Build and Operate, Design Build Operate and Transfer, Operation and Maintenance, Build-Operate and Transfer, Design Build, Design Build Operate and Maintain are the most used PPP models for markets remodeling. Risks such as price, completion delays, operating cost, expropriation, review of tariff and change in interest rates were mostly reported with higher significant descriptive score. In terms of risk associated with remodeling of markets using PPP arrangement by the actors, the associated risk for the private sector was more compare to the public sector with mean score of 37.3 and 34.5 respectively. Overall, in this study, the results has shown significant success factors on remodeling of markets in FCT, Abuja Nigeria as well as the risks associated with it.

Keywords: Critical Success Factors (CSFs), Markets Remodeling, Public-Private Partnership (PPP)

ecade, the private sector's participation in the construction and funding of public infrastructure and services has increased dramatically in developing countries. (Li *et al.*, 2005). The usage of PPP procurement method aid public sector in the development of infrastructure while also allowing them to reduce their debt profiles (Sanni, 2016).

Oyedele (2019) pointed out that between 2014 and 2025, nearly \$78 trillion will be spent on capital projects and infrastructure provision globally. PPP as a tool has been used in Nigeria for over a decade, and during that period, but few infrastructural projects have been implemented, while others have failed. Meanwhile, with the records of some success stories, in Nigeria, the governments (federal and state) started to look at more subtle ways of using private sector capital in the



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airports, market facilities, educational centres, and other facilities. (Babatunde, Opawole and Akinsiku, 2012).

The implementation and application of the PPP definition and mechanism varies in both developed and developing countries. Despite the disparities, the public-private partnership procurement mechanism has drawn the attention of many countries and is gaining traction in the construction of public infrastructure facilities around the world. In Nigeria, for example, the PPP principle is regarded as a reform mechanism for addressing inefficiencies and a lack of dynamism in the provision of essential infrastructure facilities in the country's economic growth. (National Policy on PPP, 2008). In identifying the critical success factors in public-private partnership on general infrastructure development in Nigeria, Babatunde et al (2012) reported the following critical factors; availability of suitable financial market, thorough and realistic assessment of the cost and benefits, competitive procurement process, government involvement by providing a guarantee, political support, stable macroeconomic condition, appropriate risk allocation and risk sharing, sound economic policy and favourable framework,. The study also revealed that the most significant Critical Success factors for private investors are a well-organized and dedicated public agency; social support; project technological feasibility; and multi-benefits objectives.

In another more recent similar finding by Sani (2016), seven critical success factors were enumerated to determine project success. They include; risk allocation and economic policy, delivering publicly needed service, projects feedback, leadership focus, short construction period, favourable socio-economic factors, and good governance and political support. However, it was concluded that if the government should concentrate on these key factors in the implementation process, more developmental projects could be delivered by PPP.

It is unarguable that Nigeria has a significant infrastructure deficit, and that the infrastructure that is available is not being utilized to its full potential. The infrastructure report of Nigeria just like any third world country is nothing to write home about (Oyedele, 2019). The provision and



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nothing to write home about (Oyedele, 2019). The provision and development of infrastructure that will meets the demands of the people which is the obligation of the government has been a major challenge in developing nations majorly due to budget constraint, the lack of capacity and technical know-how. Cohen and Grant (2018) opined that it is obvious that the government cannot perform her obligations without the support of the private sector or external investment. Market as an infrastructure is not exempted from this ordeal. Across Nigeria, major commercial markets are in bad state and require rehabilitation or redevelopment. The impact of economic activities in markets on the GDP of Nigeria cannot be overemphasized. Adeogun and Taiwo (2011) stated that though the PPP arrangement is relatively new in Nigeria and some other developing nations, its adoption in various areas of the economy is becoming more popular. It has been used in the development of commercial markets such as Dutse Pe Market, Abuja handled by Property and Estate Limited, Kubwa Maitama Market handled by H & I Construction Nig Ltd; Garki Ultra Modern Market by Urban Shelter Limited all in Federal Capital Terriotry, Abuja.

#### Conceptual Clarification

PPPs (Public-Private Partnerships) have exploded in popularity around the world in recent years. Governments in both developed and emerging countries are largely relying on public-private partnerships to provide projects and services. (Ng, Wong and Wong, 2012). The term 'Public Private Partnership' PPP does not have any widely accepted definition rather various publications on the subject view it has a long term collaborative arrangement between the public and private sector for providing public infrastructure and service delivery (Olugbenga & David, 2016). ). It is also explained as a form of cooperation between public authorities and the private sector to finance, construct, renovate, manage, operate or maintain an infrastructure or service. This could be a healthcare facility, market, public infrastructure, stadium etc. Public Private Partnership involves some form of risk sharing between the public and the private sector for providing the infrastructure of service. The concept of



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over 134 developing countries, accounting for around 15-20% of total infrastructure spending. PPPs are a tool that governments routinely turn to in fulfilling their obligations regarding public infrastructure and operation—a phenomenon that is increasingly taking hold in developing countries—due to their perceived advantages in off-budget financing, expected productivity improvements, and enhanced service quality. Governments all over the world, especially in developed countries, face funding and expertise shortages when it comes to bridging infrastructure gaps (Dahiru and Muhammad, 2015).

Africa is expected to need \$93 billion per year until 2020 to address its infrastructure deficit. (Bwanali and Rwelamila, 2016). Some African governments are increasingly turning to the private sector in the form of public-private partnerships (PPPs). PPP, as a creative financing model, offers African governments the chance to boost service delivery.

The concept of public-private partnership in Nigeria is not a new thing. In fact, it has been a means to address the infrastructural deficit that the nation is faced with (Oyewobi et al. 2012).

The following are the main characteristics of PPP as defined by Oyedele (2013);

- 1. Because of the various interests of the parties concerned, the legal framework must be sound.
- 2. Costing must be efficient and reliable. Many of the risks must be taken into account in the costing.
- 3. The source of funding must be reliable, available, and long-term.
- 4. Both parties must have technical knowledge of the infrastructure being built, although at varying levels.
- 5. It must be based on the concept of value for money (vfm), and it must be cost-effective, reliable, and effective.

Adamu (2016) affirmed that PPP models can be categorized based on the level and nature of risk that is assigned to the private sector. He further states that, the type of PPP to be used is mostly determined after proper evaluation and proper examination of any of the chosen objective



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evaluation and proper examination of any of the chosen objective concerning its significance, importance and specificity. Bamidele et al (2015) also indicated that PPP arrangement differs from one another and the model of arrangement is based on the type, capacity and magnitude of the project or infrastructure to be delivered. Studies of various researchers (Kwak, Chih & Ibbs (2009), FMW (2013), Adamu (2015)) argued that categorizing PPP models is based on the extent of duties allocated to each parties in any partnership arrangement.

There are various PPP models, Egbewole (2011); Ikpefan (2013); Oyedele (2013) & Kwak et al (2009) highlighted the model of PPP arrangements that can be used for any PPP projects. They include; Design Build; Design, Build and Maintain (DBM); Design-Build-Operate (DBO); Design, Build, Operate and Maintain (DBOM); Design, Build, Operate and Transfer (DBOT); Build, Own, Operate and Transfer (BOOT); Build-Own-Operate (BOO); Design-Build-Finance-Operate/Maintain (DBFO); Rehabilitate, Operate and Transfer (ROT); Joint Development Agreement (JDA) and Operation and Maintenance (OM).

Palmer (2009) & Dominic et al (2015) argues that there are four different types of PPP models which can also be referred to as PPP contract type which includes; Service Contract, Management Contract, Lease Contract and Concession

PPPs have become a worldwide phenomenon due to the three key types of benefits they provide: the ability to create innovative infrastructure services despite short-term financial constraints; increased service efficiency and creativity through the use of private sector expertise and performance incentives; and finally, value for money realized through procurement, design, and operating efficiencies (Bwanali and Rwelamila, 2016).

Due to the unpredictability of project risk, risk allocation between the private and public sectors is a challenging aspect of PPPs (Economist Intelligence Unit Limited, 2015). As a result, if the PPP is correctly built from the start, these performance improvements will be passed on to the end user. The cost of non-delivery of services and delays in design,



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imperative of business performance, are all factors that go into the VfM consideration. The private sector's involvement is driven by operational efficiency, particularly where contract values and service fees have been predetermined in legal contracts. The required degree of productivity will not be achieved by the private sector party without sufficient risk transfer, which will obscure the benefit gained from the relationship.

PPP risks emerge from the ambiguity surrounding the occurrence of specific incidents and their effects on the project. Given the contract's length, a variety of incidents, such as changes in government policy or a drop in demand for infrastructure services, may occur. As a result, it's important that threats are appropriately allocated to the party best positioned to manage them if they arise. Market risks, development/planning risks, project risks, political risks, regulatory risks, and financial risks are all common risks associated with the PPP system. (Bwanali and Rwelamila, 2016).

The allocation of these risks between the public and private sectors is also critical to the design of a PPP, according to the Commonwealth Secretariat(2010), in order to ensure that the PPP delivers VfM. In a PPP, the most important concept for risk allocation is to give the risk to the party who can better handle it (Bwanali and Rwelamila, 2016)

According to the studies of Dada and Oladokun (2008) and Olaniyan (2010), the idea of critical success factors originated with Rockart (1982) and the Sloan School of Management (2013). It was first applied to construction management research in the sense of information technology and project management. The main areas of operation in which favorable outcomes are completely important for a manager to achieve his or her objectives are referred to as critical success factors (Olaniyan, 2013). Critical success factors are those factors necessary for successful implementation of PPP projects. Qiao et al (2001) in a BOT projects in China considered the following eight success factors which include; appropriate project identification, stable political and economic situation, attractive financial package, acceptable toll/traffic levels, reasonable risk allocation, selection of suitable subcontractors, management control and



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allocation, selection of suitable subcontractors, management control and technology transfer. In an investigation by Mohammed (2011) for a PPP projects in Kuwait construction industry, the five identified critical success factors include; effective procurement, project implementability; available financial market, government guarantee and favorable economic conditions. Also in a work by Olaniyan (2013), the critical success factors identified include; project management expertise, transparent and sound regulatory framework, comprehensive feasibility study, commitment, private sector financial capability, integrity, government guarantee, long planning, effective communication, realistic cost/benefits assessment, transparent procurement process, good governance, well organized public agency, sound economic policy, political stability and supports. Furthermore, critical success factors such as well-organized private sector, stable macroeconomic environment, appropriate risks allocation, integration, competitive procurement process, strong private consortium, adequate financial market and institutionalized competitive roles, complexity of project, favorable inflation, exchange and interest rates, government involvement, converging working cultures, technical innovation and local participations.

In a study by Dahiru and Muhammad (2015), critical constraint factors in PPP were identified. These include; political, economic, legal, and technical factors. The study revealed that, good governance, protective policy against political risks, appropriate risk allocation and risk sharing, strong private consortium, political stability and favourable legal framework top the list of the most critical Success Factors for realizing PPP projects in Nigeria. Other success factors identified include government involvement in providing vital guarantees, genuine commitment of partnering parties, and political support for long-term loans.

As developed by Jefferies (2006), critical success factors in PPP can be said to significantly include; financial capability and support, technical innovation, avoiding delays and cost overruns, expertise, appropriate risk allocation grant, shared authority/consensual decision-making and resources mobilization and linkages between parties.



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The data for the study were collected through semi-structured questionnaires administered to developers, consultants and area councils works departments in Abuja FCT that have been involved in PPP projects. The study area was restricted to Abuja because it is the federal capital territory of Nigeria where construction activities are at its peak coupled with its high po; pulation which makes the provision of public infrastructure necessary for the benefits of its growing population. The questionnaire used was divided into five sections: socio-demographics, rating of critical success factors in relation to markets remodeling, PPP Models relevant for markets remodeling, associated risks and risks allocation in relationship to markets remodeling. Majority fot he questions were asked on a five-point Likert scale rating with five being the highest of the rating. The sampling technique adopted was purposive in administering the questionnaire on respondents directly involved in markets remodeling through PPP in the study area. 120 copies of the questionnaire were administered on selected participants in markets remodeling. 105 copies representing 87.5% were collected and found suitable for the analysis. The data collected were analyzed through Statistical Package for Social Sciences (SPSS) using mean score and analysis of variance (ANOVA)

#### Data analysis and discussions

A total of 105 respondents participated in this study. Majority (55.0%) were from the private organization, 35.2% were consultants while 9.5% were from the public organization. Highest qualification of the respondents was mostly B.Tech/B.Sc (88.6%). Also, majority (55.3%) was quantity surveyor and 30.5% had MNIQS professional qualification. Slightly above half (55.3%) of the respondents have been working between eleven and twenty (11-20) years. See table 1.

Table 1: Socio-demographic profile

N = 105

| Variables                      | Responses                | Frequency | %    |
|--------------------------------|--------------------------|-----------|------|
| Types of responde organization | nt's Public organization | 10        | 9.5  |
| 10年後10年6月2日                    | Consultant               | 37        | 35.2 |
|                                | Private organization     | 58        | 55.3 |



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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                   |    | 1    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----|------|
| Highest Educational Qualification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | OND               | 0  | 0,0  |
| Qualification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | HND               | 4  | 3.8  |
| CASE OF THE PARTY  | B.Tech/B.Sc       | 93 | 88.6 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | M.Tech/M.Sc       | 8  | 7.6  |
| Profession of respondent                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Quantity surveyor | 58 | 55.3 |
| 1 Totession of Tespondent                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Architect         | 16 | 15.2 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Builder           | 21 | 20.0 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Civil engineer    | 10 | 9.5  |
| Professional qualification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | MNIQS             | 32 | 30.5 |
| THE REAL PROPERTY OF THE PARTY  | MNIOB             | 18 | 17.1 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | MNIA              | 12 | 11.4 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | MNSE              | 6  | 5.7  |
| The state of the s | FNIQS             | 1  | 1.0  |
| A CONTRACTOR CONTRACTOR OF THE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | No qualification  | 36 | 34.3 |
| Years of working experience                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 0-10              | 42 | 40.0 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 11-20             | 58 | 55.3 |
| Name of the Park of the Park                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 21-30             | 5  | 4.7  |

As presented in table 2 all the respondents have been involved in public private partnership before, while 94.3% have been involved in Public Private Partnership on remodeling of markets projects. Majority (49.6%) rated that the level of adoption of PPP in the FCT was 'moderate', 19.0% rated it 'very high', 17.1% rated it 'high', 5.7% rated it 'low' while 8.6% rated it 'very low'. Also, 54.3% reported they will choose PPP over traditional method of procurement and 57.1% think PPP is a better and more effective method of infrastructure procurement.



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**Table 2:** Involvement in Public-Private Partnership Project in Remodeling of Markets

N = 105

| Variables                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Responses         | Frequency | %    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-----------|------|
| Ever been involved in a Public Private Partnership (PPP)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Yes               | 105       | 100  |
| project before                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | No                | 0         | 0.0  |
| For how long have you been involved (in years)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 0-5               | 78        | 74.3 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 5 years and above | 27        | 25.7 |
| Ever been involved in a Public Private Partnership (PPP) on                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Yes               | 99        | 94.3 |
| remodeling of markets project before                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | No                | 6         | 5.7  |
| Rate the level of adoption of PPP in FCT,<br>Abuja                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Very high         | 20        | 19.0 |
| A CONTRACTOR OF THE STATE OF TH | High              | 18        | 17.1 |
| <b>建设设施设施</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Moderate          | 52        | 49.6 |
| A STATE OF THE STA | Low               | 6         | 5.7  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Very low          | 9         | 8.6  |
| Will you like to choose PPP over traditional procurement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Yes               | 57        | 54.3 |
| Methods                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | No                | 48        | 45.7 |
| Windows tarty tree March                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                   |           |      |
| Do you think PPP is a better and more effective method                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Yes               | 60        | 57.1 |
| of infrastructure procurement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | No                | 45        | 42.9 |



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Table 3: Remodeled Markets in FCT through Public-Private Partnership

| Markets                                            | Contrac<br>t Period | Commencemen<br>t Date | Completio<br>n Date | Time<br>Overru<br>n | Source<br>of<br>Financ<br>e      |
|----------------------------------------------------|---------------------|-----------------------|---------------------|---------------------|----------------------------------|
| Kubwa<br>Model<br>Market                           | 2years              | 2013                  | 2017                | 2years              | Off-<br>takers                   |
| Kubwa<br>Maitama                                   | 2years              | 2016                  | 2019                | 1year               | Off-<br>takers                   |
| Market<br>Utako<br>Modern<br>Market                | 3years              | 2017                  | ongoing             | 1year               | Off-<br>takers                   |
| Dawaki<br>Modern                                   | 2years              | 2016                  | 2019                | 1year               | Off-<br>takers                   |
| Market<br>Kukuwaba<br>Transit                      | 2years              | 2016                  | Ongoing             | 3years              | Off-                             |
| and<br>Market                                      | 2years              | 2017                  | Ongoing             | 2years              |                                  |
| Garki<br>Model<br>Market<br>Utako<br>Motor<br>Park | 2years              | 2020                  | Ongoing             |                     | Off-<br>takers<br>Off-<br>takers |

The critical success factors are presented in table 4. The preliminary qualification evaluation phase has a mean and standard deviation of 23.9



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and 3.1 respectively out of 30.0 score obtainable. The tendering phase has a mean score of 15.0 and standard deviation of 1.9 out of 20.0 score obtainable. The concession of award phase has a mean and standard deviation value of 12.2 and 1.74 respectively. Construction phase has mean score of 20.3 and standard deviation of 2.4. Operation phase has a mean of 14.7 and standard deviation of 2.8 while transfer phase has a mean of 11.2 and standard deviation of 2.4. From the mean score, most of the factors showed to be between 'Moderately Significant' and 'Very Significant'.

**Table 4**: Critical Success Factors as they affect the remodeling of markets using PPP

N=105

| Factors                                  | NS<br>(%) | SS (%)      | MS (%)       | S (%)        | VS (%)       | Mean |
|------------------------------------------|-----------|-------------|--------------|--------------|--------------|------|
| Preliminary Qualification Evaluation     | Phase     |             |              |              |              |      |
| Appropriate project identification       | -         | -           | 35<br>(33.3) | II (IO.5)    | 59<br>(56.2) | 4.23 |
| Stable political and economic situation  |           |             | 22 (21.0)    | 48(45.7)     | 35(33.3)     | 4.12 |
| Favorable legislation regulations        |           | 12(11.4)    | 22 (21.0)    | 35<br>(33.3) | 36(34.3)     | 3.90 |
| Experience with PPP projects by promoter |           |             | 33(31,4)     | 48(45.7)     | 24(22.9)     | 3,91 |
| The capability of project promoter       | -         |             | 24(22.9)     | 69(65.7)     | 12(11.4)     | 3.89 |
| Lack of funds for remodeling             | -         |             | 47(44.8)     | 22(21.0)     | 36(34.3)     | 3.89 |
| Mean=23.9; SD=3.1                        |           | 300         |              |              |              |      |
| Tendering Phase                          |           |             |              |              |              |      |
| Competitive tendering system             | 12(11.4)  |             | 35(33.3)     | 35(33.3)     | 23(21.9)     | 3.54 |
| Attractive financial package             |           | -           | 47(44.8)     | 58(55.2)     | 15 (1)       | 3.55 |
| Technical solution advance               |           | -           | 23(21.9)     | 46(43.8)     | 36(34.3)     | 4.12 |
| Equity ratio                             |           |             | 47(44.8)     | 34(32.4)     | 24(22.9)     | 3.78 |
| Mean=15.0; SD=1.9                        |           | <b>MARK</b> |              | <b>35.7%</b> |              |      |



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#### Indextinated Investigation States Constitution

| ancession Award Phase                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |          |         |           |              | 12.42                        |       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------|-----------|--------------|------------------------------|-------|
| ancrete and precise                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |         |           |              |                              |       |
| lessanable risk alberation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | -        |         |           |              |                              |       |
| special guarantees by the                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |          |         |           |              |                              |       |
| prorument                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |          |         |           |              |                              |       |
| Mean=12.2; SD=1,74                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |          |         |           |              |                              |       |
| Construction Phase<br>Quality central and supervision                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |          |         |           | 57/54.E)     | ARIKO TI                     | 18.81 |
| Selection of suitable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |          |         | 22(2)(1)  | 47/44.2      |                              | 4.23  |
| uhomtradar                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |          |         |           |              |                              |       |
| Standardization of engineering                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 100      |         |           |              |                              |       |
| contract<br>A multidisciplinary and                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |         |           | atrot n      | 10 th to                     | 2.0   |
| A multidisciplinary and multinational team                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |          |         | 45(42.9)  | 48(40.7)     | 12(0.4)                      | 3.8   |
| Good relationship with                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 1        |         | (2014)    | \$19(615-7%) | 74(223)                      | 14/1  |
| povernment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |          |         |           |              |                              |       |
| Mean=20.3; SD=2.4<br>Operation Phase                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |          |         |           |              |                              |       |
| Management central                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |          |         | 23 (2)(3) | 620 KB (80)  | 500/01/4 (B)                 | 100   |
| Training local staff                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |          | (2014)  | 53/54.30  | 46(42 E)     | 3/5((3/4/2))<br>3/2 (0):4(8) | 4/12  |
| Sound environment impact                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          | 12(0.4) |           | 1(0.5)       | 29(34.2)                     | 233   |
| Public safety                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |          |         | 34 (32.4) | 47 (44.8)    |                              |       |
| Mean=14.7; SD=2.8                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |          |         | THE R.    |              |                              |       |
| Transfer Phase Technology transfer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 12011    |         |           |              |                              | 100   |
| Operation in good condition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 12(11.4) |         | 34 (32.4) |              | 24(22.9)                     | 3.56  |
| A STATE OF THE STA |          |         | 45 (43里)  | 23 (2(3)     |                              |       |
| Overhauling guarantees                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | -        |         |           | 58 (55.2)    |                              | 3.78  |
| W #2 FD 24                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |          |         | (33.3)    |              |                              |       |
| Mean=11.2; SD=2.4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |          |         |           | E BAS        | HE COM                       |       |



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Analysis of variance (ANOVA) for the critical success factors on models of PPP according to level of usage is presented in table 4.5.1 and 4.5.2. The summary of the analysis show a significant level of the factors (f=148.5; p=0.000; d=6). The results also showed that the factors contributed 89.5% to the PPP models in remodeling markets projects (R= 0.949; Adjusted R Square=0.895; R=1.5).

Transfer phase contributed more to the level of significant (t=13.4, Sig. =0.000) follow by Preliminary qualification evaluation phases (t=10.6, Sig. =0.000), concession award phase (t=9.2, Sig. =0.000), operation phase (t=3.2, Sig. =0.002), tendering phase (t=2.6, Sig. =0.010) and construction phase which is not significant (t=1.6, Sig. =0.106)

**Table 5:** Analysis of variance (ANOVA) for the critical success factors on models of PPP

| Mode      | el Summa | ry       |                    | de la |               |               |    |     |
|-----------|----------|----------|--------------------|-------|---------------|---------------|----|-----|
| Mo<br>del | R        | R Square | Adjusted<br>Square | R     | Std.<br>Estin | Error<br>nate | of | the |
| lo a      | .949a    | .901     | .895               |       | 1.503         | 352           |    |     |

**Table 6**: Analysis of variance (ANOVA) for the critical success factors on models of PPP

N=105

| Critical Success<br>Factors  | Unstand<br>Coefficie |               | Standardized<br>Coefficients | t      | Sig. |
|------------------------------|----------------------|---------------|------------------------------|--------|------|
|                              | В                    | Std.<br>Error | Beta                         |        |      |
| (Constant)                   | 18.129               | 2.524         |                              | 7.182  | .000 |
| Preliminary evaluation phase | -1.138               | .108          | 755                          | 10.579 | .000 |
| Tendering phase              | 364                  | .138          | 149                          | 2.645  | .010 |



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a. Dependent Variable: models

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| Concession award phase | 2.352 | .257 | .887  | 9.167  | .000 |
|------------------------|-------|------|-------|--------|------|
| Construction phase     | .150  | .092 | .077  | 1.633  | .106 |
| Operation phase        | 473   | .148 | 289   | 3.198  | .002 |
| Transfer phase         | 2.822 | .211 | 1.476 | 13.374 | .000 |

## PPP model according to their level of usage in remodeling of market

The PPP model according to their level of usage in remodeling of market is presented in table 7. Responses to the factors ranged from 'always, often, sometimes, rarely and never'. The mean score of all the factors was 41.9 with standard deviation of 4.6. Always was scored as 5.0, often was scored as 4.0, Sometimes was scored 3.0, Rarely was scored 2.0, and Never was scored 1.0 point.

Table 7: PPP models according to their level of usage in Remodeling of Markets

| BY  |   | 4 | 0  |   |
|-----|---|---|----|---|
| N.I | _ |   | 11 | - |
| 1.4 | _ |   | ., |   |

| Models         | Always   | Often     | Sometimes | Rarely    | Never    | Mean |
|----------------|----------|-----------|-----------|-----------|----------|------|
| Turnkey        | 22(21.0) | 24 (22.9) | 35 (33.3) | 12 (11.4) | 12(11.4) | 3.30 |
| Design Build   | 59(56.2) | 46(43.8)  | - 0       | -         | 3        | 4.56 |
| and Operate    |          |           |           |           |          |      |
| Operation and  | 35(33.3) | 59(56.2)  | 1. A. 1   | 11(10.5)  |          | 4.12 |
| Maintenance    |          |           |           |           |          |      |
| Design Build   | 35(33.3) | 36(34.3)  | 23(21.9)  | 11(10.5)  | -        | 3.90 |
| Design, Build, | 46(43.8) | 48(45.7)  | 11(10.5)  |           | 1        | 4.33 |
| Operate and    |          |           |           |           |          |      |
| Transfer       |          |           |           |           |          |      |
| Build-Own-     | 12(11.4) | 23(21.9)  | 46(43.8)  | 24(22.9)  |          | 3.22 |
| Operate        |          |           |           |           |          |      |



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| Build, Own,                      | 11(10.5) | 36(34.3) | 35(33.3) | 23(21.9)                                 |          | 3.33                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|----------------------------------|----------|----------|----------|------------------------------------------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operate and                      |          |          |          |                                          |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Transfer                         |          |          |          |                                          |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Design-Build-                    | 23(21.9) | 36(34.3) | 34(32.4) |                                          | 12(11.4) | 3.55                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Finance-                         |          |          |          |                                          |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Operate                          |          |          |          |                                          |          | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| /Maintain                        |          |          |          |                                          |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Build-Operate                    | 23(21.9) | 58(55.2) | 24(22.9) | 7                                        |          | 3.99                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| and Transfer                     |          |          |          |                                          |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Operations,                      | 12(11.4) | 57(54.3) | 36(34.3) | A 10 10 10 10 10 10 10 10 10 10 10 10 10 |          | 3.77                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Maintenance                      |          |          |          |                                          |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| and .                            |          |          |          |                                          |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Management                       |          |          |          |                                          |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Design, Build,                   | 35(33.3) | 35(33.3) | 23(21.9) | 12(11.4)                                 |          | 3.89                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Operate and                      |          |          | 42       |                                          |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Maintain                         |          |          |          |                                          |          | Para di Para d |
| Mean= <b>41.9</b> ; SD= <b>4</b> | 4.6      |          |          |                                          |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

## Associated risk with PPP in remodeling markets

The associated risk with PPP in remodeling markets is presented in table 8. The overall mean score of the risk was 60.1 with standard deviation of 5.9. This indicated that most of the risks were 'very significant'

NS: Not Significant, SS: Slightly Significant, MS: Moderately Significant, S: Significant VS: Very Significant. NS: Not Significant, SS: Slightly Significant, MS: Moderately Significant, S: Significant VS: Very Significant. Note that; VS was scored 5, S was scored 4, MS was scored 3, SS was scored 2 while NS was scored 1.

Table 8: Associated risk with PPP in remodeling markets N=105

| Risk Associated with PPP | NS (%)   | SS (%)   | MS (%)   | S (%)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | VS (%)   | M    |
|--------------------------|----------|----------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|
| Market risks             |          |          |          | - (7u)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | V3 (70)  | Mean |
| Volume risk              | 11(10.5) | 12(11,4) | 12(11.4) | 23(21.9)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | (7/1/ D) | 0.00 |
| Price risk               |          | 11(10.5) | 11(10.5) | Could be a proposed to the control of the control o | 47(44.8) | 3.79 |
|                          |          | 11(10.0) | (ה.טו)וו | 36(34.3)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 47(44.8) | 4.13 |



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| evelopment/planning risks      |          | 11(10.5) |              | 35(33.3) | 58(55.2) | 4.34 |
|--------------------------------|----------|----------|--------------|----------|----------|------|
| Scoping, feasibility and       |          | 11(10.0) |              |          |          |      |
| structuring                    |          |          |              |          |          |      |
| <sup>3</sup> roject risks      |          |          | and the same |          | 50/500)  | 1    |
| Capital cost overrun           | -        | 11(10.5) |              | 36(34.3) | 59(56.2) | 4.46 |
| Completion delays              |          |          | 23(21.9)     | 35(33.3) | 47(44.8) | 4.23 |
| Operating performance          |          |          | 45(42.9)     | 48(45.7) | 12(11.4) | 3.69 |
| Operating costs                |          |          | 22(21.0)     | 71(67.6) | 12(11.4) | 3.90 |
| Lifecycle costs                | -        | -        | 58(55.2)     | 47(44.8) |          | 3.45 |
| Political risk                 |          |          | The same     |          | TOPIC    |      |
| Currency transfer restrictions | -        | 11(10.5) | 24(22.9)     | 34(32.4) | 36(34.3) | 3.91 |
| Expropriation                  | 11(10.5) |          |              | 35(33.3) | 59(56.2) | 4.25 |
| War/Civil disturbance          | 23(21.9) | -        | 24(22.9)     | 11(10.5) | 47(44.8) | 3.56 |
| Regulatory risks               |          |          |              |          |          |      |
| Regulations for participation  | -        |          | 46(43.8)     | 59(56.2) | -        | 3.5  |
| Periodic review of tariffs     |          |          | 47(44.8)     | 36(34.3) | 22(21.0) | 3.78 |
| Financial risks                |          |          |              |          |          |      |
| Exchange rate appreciation     |          | +        |              | 47(44.8) | 58(55.2) | 4.5  |
| Changes in interest rates      |          |          |              | 47(44.8) | 58(55.2) | 4.5  |

**Table 9:** Risks associated to remodeling of markets using PPP arrangement to the actors.

#### N=105

| Risk Associated with PPP | Public   |                 |                       | Private     |                 |                       |
|--------------------------|----------|-----------------|-----------------------|-------------|-----------------|-----------------------|
|                          | High (%) | Moderate<br>(%) | Not<br>related<br>(%) | High<br>(%) | Moderate<br>(%) | Not<br>related<br>(%) |
| Markets risk             |          |                 | (,3)                  |             |                 | (70)                  |
| Volume risk              |          | 43 (41.0)       | 62(<br>59.0)          | 12 (11.4)   | 39 (37.2)       | 54<br>(51.4)          |



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| Price risk                              | -         | 48 (45.7)     | 57<br>(54.3)                             | 21<br>(20.0) | 34 (32.4) | 50<br>(47.6)                                                       |
|-----------------------------------------|-----------|---------------|------------------------------------------|--------------|-----------|--------------------------------------------------------------------|
| Development/planning risks              | \$ 360 m  | CONTRACTOR OF |                                          |              |           |                                                                    |
| Scoping, feasibility and structuring    | 21 (20.0) | 34 (32.4)     | 50<br>(47.6)                             | 16<br>(15.2) | 89 (84.8) |                                                                    |
| Project risks                           |           |               | ,                                        | dwell.       |           |                                                                    |
| Capital cost overrun                    | 89(84.8)  | 16 (15.2)     | -                                        | 16<br>(15.2) | 40 (38.1) | 49<br>(46.7)                                                       |
| Completion delays                       | 78(74.3)  | 27 (25.7)     | -                                        | 27<br>(25.7) | 35 (33.4) | 43<br>(40.9)                                                       |
| Operating performance                   | 77(73.3)  | 28 (26.7)     | - 14 14 14 14 14 14 14 14 14 14 14 14 14 | 28<br>(26.7) | 65 (59.0) | 12 (11.4)                                                          |
| Operating costs                         | 91(86.7)  | 14 (13.3)     | •                                        | 14<br>(13.3) | 72 (68.6) | 19 (18.1)                                                          |
| Lifecycle costs                         | 87(82.9)  | 18 (17.1)     | -                                        | 18<br>(17.1) | 70 (66.7) | 17<br>(16.2)                                                       |
| Political risk                          |           |               |                                          |              |           |                                                                    |
| Currency transfer restrictions          | 40(38.1)  | 65 (59.0)     | - 200                                    | 16<br>(15.2) | 89 (84.8) | •                                                                  |
| Expropriation                           | 35(33.4)  | 70 (66.7)     |                                          | 27 (25.7)    | 78 (74.3) | -10<br>-10<br>-10<br>-10<br>-10<br>-10<br>-10<br>-10<br>-10<br>-10 |
| War/Civil disturbance                   | 65(59.0)  | 40 (38.1)     |                                          | 28<br>(26.7) | 77 (73.3) | -                                                                  |
| Regulatory risks                        |           |               | Je . 4                                   | 7.4          |           |                                                                    |
| Regulations for participation           | 70(66.7)  | 35 (33.4)     | ·                                        | 28<br>(26.7) | 91 (86.7) |                                                                    |
| Periodic review of tariffs              | 40(38.1)  | 65 (59.0)     | 7 11                                     | (13.3)       | 87 (82.9) |                                                                    |
| Financial risks                         |           | IT I          |                                          |              |           |                                                                    |
| Exchange rate appreciation/depreciation | 16(15.2)  | 89 (84.8)     |                                          | 65<br>(59.0) | 40 (38.1) | -                                                                  |



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|-----|---|---|---|--|
|     |   |   |   |  |

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| ESHA DINANA               | Mean= 34.5 ;SD=2.1   | Mean= 37.3;SD=1.8        |
|---------------------------|----------------------|--------------------------|
| Changes in interest rates | 27(25.7) 78 (74.3) - | 72 33 (31.5) -<br>(68.5) |

The table 9 shows the risk associated to remodeling of markets using PPP arrangement to the actors, the findings revealed that there was associated higher risk with the private sectors (Mean=37.3; SD=1.8) than the associated risk with the Public sector (Mean=34.5; SD=2.1).

#### Conclusion

This paper set out to evaluate critical success factors in public-private partnership (PPP) on remodeled markets in Nigeria with a view to improve the usage of the procurement method in markets remodeling, conclude that Transfer phase factors, preliminary qualification evaluation phase factors, concession award phase factors, operation phase factors and tendering phase factors are the critical factors that determine the success of remodeled markets using PPP arrangement while construction phase factors are not significant in the success of this arrangement in Nigeria. Also, the private sector solely relies on the off-takers to finance these projects which always lead to time overrun. Furthermore, The most used PPP models for remodeling of markets include Design Build and Operate, Design Build Operate and Transfer, Operation and Maintenance, Build-Operate and Transfer, Design Build, Design Build Operate and Maintain. Market risks, project risks, political risk, regulatory risk and financial risks are more associated with remodeling of markets using PPP arrangement by the actors. The private sectors bear more risks compare to the public sector.

The study finally concluded that Public-Private Partnership (PPP) arrangement is very effective in remodeling of markets in Nigeria.

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