KEY PERFORMANCE INDICATORS FOR PUBLIC-PRIVATE PARTNERSHIP COMPANIES IN NIGERIA: A
STUDY OF POLO PARK MALL, ENUGU

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Abstract
This paper examined the critical issues involved in designing key performance indicators (KPIs) systems for managing Public Private Partnership (PPPs) companies or projects in Nigeria, with Polo Park Mall, Enugu as the case study. The methodology comprised two major approaches: survey method and case study approach. In the latter, the narrative technique backed with three out of the four widely used stages for developing KPIs systems for companies was used to depict the efforts being made to design a KPIs system for the study company by its management. In the former, questionnaire was used to collect primary data from 301 respondents who were randomly selected from four different groups of stakeholders in the said PPP company. Descriptive statistics was used to analyze the data, while the three research hypotheses were tested using One Way ANOVA. Findings of showed that five KPIs- physical characteristics of projects, financing and marketing, and innovation and learning play significant roles in measuring the performance of companies particularly PPP undertaking, with the first three as the most important. The study found also that there exist significant differences between the perceptions of the four different groups of stakeholders (clients, consultants, contractors, and financiers) on the contributions of the said three most important KPIs in the measurement of the performance of PPP companies or projects. Finally, it was recommended that the study company should devote more efforts and resources in the on-going implementation of its KPIs system, and should pay greater attention to exploring the great opportunities that lie with the development of its ICT system to serve as a backbone for its KPIs programme.

Key words: Public private partnerships, key performance indicators, stakeholders, performance, projects

Introduction
Several failed efforts to bring about or effectively manage certain forms or sizes of business enterprise or infrastructure project developments have compelled major stakeholders in developing countries to begin to consider deploying the strategy of Public Private Partnership as an alternative procurement options for these projects and enterprises in place of the traditional method whereby government or public agency remains the sole financier and manager of such projects or enterprises (Ibem & Aduwo, 2014). From evidence, the PPP option has demonstrated advantages of increased efficiency in project redelivery, operation and management; availability of additional resources to meet the growing needs of investment, and access to advanced technology (Economic and Social Commission for Asia and the Pacific- ESCAP, 2013). These inherent advantages of PPP have been attractive to governments in Nigeria and other developing countries. PPP enhanced the supply of much needed infrastructure services as this may not require any immediate financial commitment on the part of government; project risks to the private sector; and promotes better project design, choice of technology, construction, operation and service delivery (Ogunsanmi, 2013; Mazouz, Facal, & Viola, 2015).

In the past three decades or so, there have been spirited efforts among the key stakeholders in Nigeria to deploy the PPP procurement option for both infrastructure projects and companies. For instance, Babatunde et al. (2014) list some projects executed using the PPP model by the Lagos State government in Nigeria to include Bus Rapid Transit Scheme (BRT), Diagnostic centres, Mortuary Service and Lekki Toll road projects. Other States in Nigeria such as Cross-River State, developed Akampa toll road project and the Tinapa Free Trade Zone; Rivers State is developing the Greater Port Harcourt housing scheme, and Benue State, the Teragro Benfruit Plant using PPP arrangement (Nigeria PPP Review, 2014; Oyewole, 2014).

For PPP project (infrastructure or companies) already completed and operational and also for those in the pipeline, there is a need to design the key performance indicators that will enhance their performance in Nigeria. Most of the completed PPP projects in Nigeria and in other developing economies have been described as successful, but the question is: how effective or how good are these projects? Do
they meet their performance evaluated, in terms of project characteristics, financial and marketing, innovation and learning, stakeholders and process indicators? Performance indicators have been described as potential effective attributes to measure overall effectiveness of PPP system (Yuan et al., 2013).

These days in the era of growing global competition, running a successful business is getting more difficult and complicated than before. In order to remain competitive, companies and organizations need to practice Management by Objectives (MBO) which is a method whereby managers and employees define goals for every department, project and employee and use them to monitor subsequent performances (Daft and Marcic, 2014). This performance measurement system is capable of providing a basic comparison over the time that will be able to point out whether performance had improved, deteriorated or simply remained static (Theodore, 2013).

Performance measurement is not static. It changes as performance issues vary, as marketing strategies change, and as technologies and the means to measure and record performance change over time (Smith, 2015). However, performance must be aligned with strategy, must have balance between qualitative and quantitative methods, have clear framework and lastly measurement as means for growth (Base, 2013). Key Performance Indicators (KPIs) is one of the tools for evaluating performance measurements. KPIs allow a company to see what areas it is executing well and what areas require improvement. Whatever KPIs selected must reflect the organization’s goal, must be key to success, and they must be quantifiable (Bose, 2013).

Before good KPIs can be developed, the knowledge of KPIs will need to be trained to the company’s top management who are the people responsible for planning and organizing the company strategies. Once the top management is familiar with the KPIs concepts, then only they are able to utilize the company financial and operational information to link to the mission, vision, objectives and goal to develop the company KPIs. Nonaka & Takeuchi (2015) argued that a successful knowledge management (KM) program needs, on the one hand, to convert internalized tacit knowledge into explicit codified knowledge in order to share it, but, on the other hand, it also must permit individuals and groups to internalize and make personally meaningful codified knowledge they have retrieved from the KM system. Thus, a development plan will also need to be established in order to have a successful KPI implementation throughout the organization.

The aim of this study, therefore, is to examine the critical issues particularly the steps involved in designing key performance of PPP companies in Nigeria. In addition, the study tried to compare the perceptions of different groups of stakeholders on the contributions of the most important KPIs in the measurement of the performance of the said companies, and to find out if any significant difference exists between such perceptions. The study’s focus is the Polo Park Mall, Enugu. The Mall is a N5.2 billion PPP undertaking between the Enugu State Government, the Persinasas Group and a consortium of banks in Nigeria as the key players. The study is significant as it provides current knowledge on key performance indicators in PPP projects. It also contributes to performance management literature in PPP. Awareness is created through this to both government and the private sector on the key performance indicators that could be used to improve PPP projects. This study can also serve as a springboard for further research on KPIs in PPP projects in developing countries where PPP is being considered as a preferred procurement option or management tool in developing countries.

Statement of the problem
In spite of the few successes so far recorded with the PPP strategy since over two and a half decades ago when it was adopted as a procurement option in Nigeria, the effort has been riddled by a number of problems and failures. These have found expression in the forms of controversies, public outcry, and several cases of project abandonment (Ovewole, 2014). Three instances could illustrate the foregoing scenario. Victoria Island-Epe Expressway (a PPP project) failed because the concessioner (Lekki Concession Company (LCC) did not carry along the other stakeholders. Messrs Maevis airport landing fee-collection concession at Murtala Muhammad Airport, Ikeja, failed because of heavy non-receipted amount paid upfront by the concessioner (corruption). The Bicourtney concession exercise to develop and manage Lagos-Ibadan Expressway into five lanes using PPP option failed because Bicourtney (the concessioner) could not get a financer or financiers for the project.

In addition to the foregoing, the main problems with the PPP option in Nigeria have much to do with the failure of the top management of PPP organizations to adopt ab initio a management strategy that is based on the Management By Objectives (MBO) principle...
that requires designing a performance measurement tool like the key Performance Indicators (KPIs) for the running of the business. This being the case, the consequence of the foregoing is that such organizations are run on some strange strategies that are anchored on “trial-and-error” principle that often lead to inefficiency and failure.

Another problem of this study lies with the fact that both the PPP procurement option and KPI tool are of recent developments on the Nigerian business scene such that not much attention of previous researchers has been paid to these two issues. The consequence of the foregoing is that very few research documents are available for use by the present researcher.

Conceptual framework
The meaning of PPP
According to Cheung (2012), Abd-Aziz et al. (2010) and Ibem & Aduwo (2013), Public Private Partnership (PPP) represents a wide range of institutional and contractual arrangements between public and private sectors whereby they agree to pull resources (funds and expertise) together, share responsibilities, risks and benefits in order to procure a project or organization and run such efficiently.

PPP arrangements come in many forms but two categories are in use, which is identified as institutionalized and contracting arrangements (Gunnigan & Rajput, 2010). Variants of PPP or other similar arrangements used for existing services and facilities procurement include Design-Build (DB), Design-Build Maintain (DBM) also known as Build-Operate-Transfer (BOT). Some models such as service contracts, Management contracts, Lease, Concession and Divestiture are also in use for infrastructure procurement. In Nigeria, PPP arrangements such as DB, BOO, BOT, DBM, joint ventures, lease, Divestiture have also been used in projects (Ibem & Aduwo, 2013).

The concept of key performance indicators
KPIs are also referred to as Key Success Indicators (KSI) and are helpful to organizations to define and measure their progress towards achieving set organization goals (Reh, 2013). Performance indicators are used virtually in all industries such as construction, software development, hospital, mining, logistics, manufacturing, sale of goods and services. Performance indicators are associated with performance improvement initiatives. Holman (2013), states that a performance measurement compares actual returns against a pre-specific benchmark. Key performance indicators include benchmarks, targets, milestones, dates, numbers, percentages, variances, distribution rates, time, cost, indexes, ratios, survey data and reports that are used to evaluate a phenomenon.

Smith (2015) defined KPIs as measure of success or compliance. Bury (2015) believed that KPIs through the definition and measurement of progress help organizations achieve their goals. Moore (2014) also described the term KPIs as performance targets given to individuals or organizations indicating how performance will be measured, and the target must adapt to meet business situations.

Haque & Moore (2014) stated that the feedbacks gained from the performance measurement results will be attended to and simultaneously too, the indicators are required to assess achievement. With good KPIs as one of the performance measurement tools, companies or organizations can be confident with their manufacturing tools and techniques implementation for achieving their goals and objectives. Hence, good KPIs must be clear and able to measure specific aim.

Why do organizations currently choose KPIs? Waters & Bevan (2015) explained that organizations opted for KPIs in order to reduce development timescales and cost, and also to use its highly skilled people effectively. Bose (2013) mentioned that KPIs allow the organization to see what areas it is executing well and what areas require improvement. Toni et, al. (2015) stated that the identification of appropriate KPIs as well as aligning them with company strategies can become the key to realizing bottom line impacts.

Joyce & Woods (2011) stated that good performance indicators must consider:

i. Long-term and short-term linkages to traditional measures of profitability, return to capital employed, earnings per share, etc.
ii. Balance between financial and non-financial factors.
iii. Strategic aims which need to be translated into critical success factors.
iv. Efficiency and effectiveness concerning the ratio of outputs relative to inputs.

KPIs have served as useful tools in evaluating PPP projects. Yuan et al. (2013) undertook a study on the management of the performance of PPP projects to achieve value for money where some of the performance indicators were selected. This study provides insight into performance management for managing the process of PPP as to improve the output of PPP projects. Yuan et al’s study indicates
that these KPIs are useful tools for assessing the strengths and weaknesses of PPP projects. KPIs are used by management to evaluate the performance by comparing actual and estimated performances in terms of effectiveness, efficiency, quality and workmanship. Yuan et al. (2013) established a conceptual model of KPIs that is built on stakeholders’ requirements that could influence performance of projects.

In the first place are the characteristics and features of the PPP projects which will affect performance of projects at the beginning stage. These indicators will influence concessionaire selected, agreement between private and public sectors, risk allocation and the extent to which the project will achieve success under the influence and marketing indicators, innovation and learning indicators as well as stakeholders’ indicators. These indicators reflect economic, innovation, culture and benefits of the stakeholders’ indicators.

Other indicators include factors that affect construction, operation, maintenance, transfer and post-transfer processes. Yuan et al had emphasized that the second and third indicators must be dynamic and measurable to evaluate efficiency, customer satisfaction, business success, product requirement and future potentials of PPP projects. Therefore performance improvements are measured using these three indicators. Similarly, the current study draws on Yuan et al.’s (2013) developed KPIs by using physical characteristics of projects, financing and marketing, innovation and learning, stakeholders, as well as process indicators for the investigations.

**Basic steps in developing KPIs**

Davidson (2006), an expert in the area of organizational learning and technology strategy, along with his team members had enunciated a process for developing relevant KPIs for companies or projects. The said process involves four critical stages: planning, designing, implementing, and measuring the effectiveness for continuous improvement. The process and its component four stages are shown in Fig. 1 below.

**A case study analysis in developing KPIs**

**Area of study**

The area of study was Polo Park Mall, Enugu. The Park is a N5.2 billion undertaking developed by Polo Park Development Company, a Public Private Partnership (PPP) involving the Enugu State Government, the Persians Group (owners of The Palms Shopping Mall, Lekki Lagos), and a consortium of five banks providing the funding. The mall stands on an 80,000 square feet parcel of land located along Abakaliki Road, GRA Enugu directly opposite Government Technical College, Enugu-the site of the former Polo Amusement Park, Enugu. The Mall is designed as a two-storey building, excluding the mezzanine and the ground floor (http://enugustatetourismboard.com).

Facilities already completed that form the first phase of the Mall include an entertainment arcade, five (5) cinema halls, office spaces, 67 standard retail shops, a food court, and a parking space that accommodates 1,320 vehicles at once (The Guardian, July 6, 2009). The second phase of the project which is designed to house a hotel and an office complex has since commenced in earnest. While construction work at the site of the Mall commenced in April 2009, business activities started on September 18, 2011 (http://www.nairaland.com).

**The case study**

In its effort to develop an appropriate KPIs system for the PPP undertaking, the management of the Polo Park development company adopted the case study approach, involving planning, designing, implementing, and measurement.

**Methodology**

The study was carried out in Enugu metropolis using descriptive research design. The population for the study was 1,401 that comprised staff of the various retail outlets operating in the Mall and staff of the Enugu State Tourism Board (clients), staff of the various consultant companies (consultants), contractors, and staff of the funding banks (financiers). Out of this population, a sample size of 301 of 4 groups was determined and formed the respondents for the study.

Stratified and simple random sampling techniques were used to select the respondents. Questionnaire which was validated through a pilot study and a Cronbach’s Alpha co-efficient of 0.833 was used to collect data for the study. The questionnaire was made up 34 close-ended items on a 5-point Likert scale. Descriptive statistics was used to analyze the data collected with the aid of Statistical Package of Social Scientists (SPSS). The three hypotheses of the study were tested using a statistical tool known as One Way Analysis of Variance (ANOVA).

**Presentation of results**

Data collected were first coded and fed into the Excel spreadsheet. The data analysis was done at 5% level
of significance. The analyzed data were also used for testing the three hypotheses for the study using one way ANOVA as follows:

Test of hypotheses

**H₀₁:** There is no significant difference between the perceptions of the different groups of stakeholders on the contributions of the physical characteristic of project’s KPTs in measuring the performance of PPP companies.

Table 1: One way ANOVA test of hypothesis 1

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F*</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>8.882</td>
<td>4</td>
<td>2.221</td>
<td>9.614</td>
<td>.000</td>
</tr>
<tr>
<td>Within Groups</td>
<td>63.514</td>
<td>297</td>
<td>.231</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>72.396</td>
<td>301</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Field survey 2016

The ANOVA Table 1 shows that the calculated F* value is greater than the tabulated F value (i.e. F*9.614>F 2.600). Thus, the null hypothesis stands rejected. This infers that there is significant difference between perceptions of deterrence groups of stakeholders on the contribution of the physical characteristics of projects KPIs in measuring the performance of PPP companies.

**H₀₂:** There is no significant difference between the perceptions of the different groups of stakeholders on the contributions of the financing and marketing KPIs in measuring the performance of PPP companies.

Table 2: One way ANOVA test of hypothesis 2

<table>
<thead>
<tr>
<th></th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean square</th>
<th>F*</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>25.020</td>
<td>4</td>
<td>12.510</td>
<td>16.273</td>
<td>.000</td>
</tr>
<tr>
<td>Within Groups</td>
<td>212.948</td>
<td>297</td>
<td>.769</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>237.968</td>
<td>301</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Field survey, 2016

The ANOVA table 2 shows that the calculate F* value is greater than the F tabulated value (i.e. F*16.273>F 2.600). This means that the null hypothesis is rejected inferring that there is no significant difference between the perceptions of the different groups of stakeholders on the contributions of the financing and marketing KPIs in measuring the performance of PPP companies in Nigeria.

**H₀₃:** There is no significant difference between the perceptions of different groups of stakeholders on the contributions of innovation and learning KPIs in measuring the performance of PPP companies in Nigeria.

Table 3: One way ANOVA test of hypothesis 3

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F*</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>39.818</td>
<td>4</td>
<td>13.273</td>
<td>38.138</td>
<td>.000</td>
</tr>
<tr>
<td>Within Groups</td>
<td>96.053</td>
<td>297</td>
<td>.348</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>135.871</td>
<td>301</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Field survey

As table 3 shows, the calculated F* value is greater than the tabulated F value (i.e.38.138>F 2.600). This implies that the null hypothesis be rejected. This also infers that there is significant difference between the perceptions of the different groups of stakeholders on the contributions of the innovation and learning KPIs in measuring the performance of PPP companies in Nigeria.
measuring the performance of PPP companies in Nigeria.

Discussion of findings

From the findings of this study, it can be concluded that there are several key performance indicators investigated that will improve performance of PPP projects in Nigeria. Most important out of such KPIs according to the findings of this study include the physical characteristics of projects indicators, financing and marketing indicators, and innovation and learning indicators. However, the perceptions of the different groups of stakeholders on the contributions of these three KPIs in the measurement of the performance of PPP companies in Nigeria vary significantly.

Though it is yet to be proved at the time of this research that KPIs have benefited the company, they have provided its management with the Management By Objective (MBO) tool to evaluate the performance of the company for improvement in the future. With performance measurements based on QCDAC principle, the company is now able to identify the areas of its strength and weakness and can now focus on opportunities for improvement. Most importantly, the KPIs reflect the company’s mission, vision, objectives and goal which are key imperatives to the company's success.

Conclusion

Although the planning, designing and implementation stages were successfully done, this project is far from complete. The next challenges are on measuring the KPIs effectiveness while improving the manual KPIs tracking. Currently, a quarterly review business strategy session was held to discuss the KPIs results. The company is also starting to incorporate the employees' KPIs in the performance appraisal system where the employees' performance is now able to be measured objectively thus improving their morale and motivation.

Recommendations

It is recommended that the management of the company should devote more efforts and resources towards further improvement of the KPIs implementation program. Secondly, the KPIs team should also explore those great opportunities that lie in the development of the company’s intranet system (Local Area Network).

References


