STRATEGIC INFLUENCE OF PROJECT MANAGEMENT ON PERFORMANCE OF SELECTED CONSTRUCTION INDUSTRY IN DELTA STATE, NIGERIA

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ABSTRACT

The study investigated the effect of project management on organizational performance of selected construction companies in Delta State, Nigeria. The specific objectives of this study were to provide evidence on the effects of monitoring and evaluation (M & E) on organizational performance and to ascertain the influence of risk management on organizational performance. Three construction firms located in Asaba metropolis of Delta State were selected. The study relied on primary data which were obtained using structured questionnaire administered to 169 purposively selected respondents of the construction firms. The data collected were analyzed using Analysis of Variance (ANOVA) and correlation analysis in pursuance of the stated specific objectives of the study. The result showed that monitoring and evaluation and risk management have significant effects on organizational performance of the selected construction firms. The study concluded that M&E in particular has a good and significant impact on organizational performance (OP). As a result,
Construction firms should keep up with and grow strategic channels of project delivery to ramp up on performance. The study recommended that project management practices should be applied systematically to the project cycle from initiation to the close out stage of projects among others.

Keywords: Business Intelligence, Profitability, Operational Performance, Level of Competition, Project Performance.

INTRODUCTION

Companies nowadays are actively looking for ways to get a competitive edge in the marketplace, which may be defined as "the ability in any functional area to make the performance of the organization better" (Ekakitie, 2009). Most nonprofits nowadays oversee project management (PROM) in a very complicated setting. According to Agbada and Ekakitie (2016), an organization's most important project efforts are the creation of new goods, the introduction of new growth strategies, and the use of an efficient outsourcing and development system. To this end, projects in nonprofits and businesses are implemented utilizing a wide range of project management approaches, each of which is carried out by a different project manager on a daily basis. According to Walker (2015) and Belassi and Tukel (2016), while evaluating the success of a project, it is crucial to take into account the project's budget, schedule, and quality. The majority of the activities that make up PROM are examined and experimented with because they have been amassed from experiences that have been continuously practiced, developed, and recognized as examples, measurements, and thus constitute baselines (Karim, 2018).

Companies that consistently achieve their project goals and objectives use effective and PROM strategies. Successful projects have strategic influence on organizations and businesses; therefore it's crucial to use sound management techniques for tracking risks and making sure the correct projects are carried out via proper prioritization of resources. When analyzing and gauging the success of a project's implementation, it is crucial to take into account the project's cost, quality, and timeline (Alagba, Ekakitie, & Rotimi, 2022; Walker, 2016).

Management is the act of directing and controlling an organization to accomplish its goals via the effective allocation of its resources. Management offered a framework in which tasks are defined, resources are assigned, master routines are developed, locations are determined, and policies and procedures are established to direct the fulfillment of responsibilities. In today's globally interconnected world, however, firms no longer afford to choose stability above long-term viability (Ekakitie, Kifordu, & Nwaegbuni, 2022). To thrive in the modern business world, companies need to embrace new technologies and modify their internal procedures to accommodate the evolving needs of their stakeholders. Throughout the project life cycle, project management combines the phases of initiating, planning, carrying out, monitoring, and completing a project to ensure that all parties involved are happy and the project meets its objectives. Constituents are individuals who may be adversely impacted by the project, whereas stakeholders have a direct interest in seeing the initiative succeed. When all of the project's constituents and stakeholders report feeling satisfied to varying degrees, that's when the project is considered a success.
It is anticipated that the company's leadership would be proactive in shaping consumer preferences via innovations that keep consumers guessing. Managers nowadays seem to be on the lookout for novel methods of running businesses in light of the aforementioned trends in technology, client affluence, and globalization. Effective knowledge creation, acquisition, and transfer, as well as behavioral adjustments to reflect new information, are hallmarks of the project management methodology (Ekakitie & Egede, 2016). Project management emphasizes methodical problem solving, and gaining from the expertise of professionals, even if practitioners still say that it is a financial metric that cannot handle complicated challenges involved with managing companies. The purpose of this research is to determine whether or not a project management strategy may help businesses improve their key performance indicators and so provide them a competitive edge.

As can be seen from the aforementioned context, project management is a process that many businesses use, either alone or in conjunction with other departments. It is worth noting that none of the aforementioned scholars have successfully used project assessment methodologies or any other means to prove that investing in project management is financially worthwhile. There are many different project management tasks that may be performed within the scope of any particular project. Various methods of completing them evolve and eventually become commonplace. An organization's adoption of project management approaches may be motivated by its desire to address specific environmental and social concerns. Members of the project management team may also develop and maintain a set of procedures for managing their projects, even if such procedures have little to do with ensuring the success of the projects themselves. The general purpose of this paper was to investigate the influence of project management on organizational performance. The specifics are: to assess the extent to which monitoring and evaluation techniques and risk management affect the performance of construction firms in Delta State, Nigeria.

REVIEW OF RELATED LITERATURE

Conceptual Review

Daft and Marcic (2018) define organizational performance as "the extent to which an organization meets its objectives through the efficient and effective application of its resources." Superior organizational performance, according to this perspective, is not a matter of chance but rather the result of the deliberate actions of strategic leaders (Daft, 2011). Strategic leaders are needed to make the all-important choice of how to approach any difficulty confronting a business.

Ekakitie and Odanibeh (2016), claim that it is essential to take into account the personalities and practices of the top management in order to grasp the whole picture of an operation's success. Organizational performance, according to Barney (2002), is the result of the willful combination of human, physical, and capital resources. The distinction between performance reporting, performance measurement and performance management is hazy, as noted by Greiling (2007).

To fully benefit from what an organization is doing, what it is doing, and how it is doing it, a good M&E system will allow for reflection on and sharing of experiences and lessons from implementation (Guijk, Randwijk, & Woodhill, 2012). According to Cavail and Sohail (2013), an M&E system provides valuable information and insight that complements and supports projects and the organization. Development actors are able to draw on one another's
knowledge and experience to solve problems; errors are exposed; and organizations are given opportunities to grow and change in light of the lessons learned. The term "knowledge management" is a result of this phenomenon; it refers to the process of "capturing findings, institutionalizing learning, and organizing the wealth of information produced continuously by the M&E system" (Gudda, 2011).

Most scholars of organization M&E argue that planning for M&E should be done just at the very point of organization planning (Kohli & Chitkara, 2018) while a few contend that it should be created after the planning phase but prior to intervention phase (Nyonje, Ndunge, & Mulwa, 2012). Despite this difference in opinion however, almost all scholars agree that the plan should include information on how organization should be assessed (Cleland & Ireland, 2017; Agbada and Ekakitie, 2016) of great importance to this study, is what the M&E plan outlines that influences organization performance (Olive, 2002; Wysocki & McGary, 2013; Mackay, 2017).

The Relationship between RM and Business Outcomes
The concept of risk has been widely discussed since it came into the field of management theory. Several authors have defined risk and given an idea of how best they think that risk should be defined and a common word that had been found; in these numerous definitions it is observed that “uncertainty” about outcomes in given situations (Ekakitie, 2020; Olsson, 2017; Ekakitie & Alagba, 2022).

Nocco and Stulz (2006) stress the importance of good RM practices to maximize firms’ value. In particular, Nocco and Stulz (2006) suggest that effective enterprise risk management (ERM) have a long-run competitive advantage to the firm (or banks) compared to those that manage and monitor risks individually. It is, therefore suggested that firms should manage risks strategically by viewing all the risks together within a coordinated manner. This is the view shared by this study. In relation to this, Stulz (1996) associates good risk management practices with the elimination of costly lower tail outcomes by proposing full-cover risk management as compared to selective risk management (Smith, 2010; Schroeck, 2002). Schroeck (2002) proposed that ensuring best practices through prudent risk management result in increased earnings.

Theoretical Underpinning
Instead of viewing complex systems like the human body as a collection of unrelated parts, system theorists focus on those parts and how they work together to form the whole. A systemic perspective on an organization's employees, teams, structures, and processes can help shed light on why certain actions were taken or why certain outcomes occurred in a particular situation. This is because the idea of a system provides a lens through which to examine the environment and the interplay between the many components.

System theory can also be used to explain the behavior of individuals and teams within an organization. Each person's unique mental and psychological processes will take an input (the cause) and produce a unique outcome (the effect). Taghipour (2019) argues that feedback is essential because it presents the idea of the organization as a system tied to a wider system. Justifiably, project management is viewed through the lens of system theory, is the process by which an organization ensures that its planned actions and results successfully and efficiently achieve their objectives. As a system of interconnected pieces, project management may
assess the efficiency of a company, a division, or the procedures used to oversee specific activities.

**Empirical Review**

The evaluation system with targets and goals has been criticized by Hume and Wright (2020), who propose instead that teams or units within an organization be given information on how they compare to others and what processes work best, along with the resources to implement those changes and invest in the professional development of their employees.

Research by Ronald et al. (2019) examined the conceptual frameworks and methods used to evaluate a multisite, regional capacity-development project in Latin America and the Caribbean designed to strengthen planning, monitoring, and evaluation in agricultural research organizations. The article outlines the procedure used and provides some consolidated findings in response to these challenges.

Ullah (2021) carried out a study examines the effect of the Risk management (RM) practices on the organizational performance of Pakistan’s Telecom sector companies; specifically the cellular mobile operator’s. The entire populations of five firms were selected and the results were informative about the significance of Risk Management practices. The findings revealed the fact that organizations with RM have significant control over uncertainties or rather crisis management and this predictive ability helps in timely development of contingency plans to stop erosion of organizational income; thereby improving their organizational performance.

Saleem (2018) proposed a survey to reflect the current risk management practices of Pakistan's software development sector from 25 organizations. They reported that, risk management practices are not widely used and that most lack the necessary policies and documents to properly manage risk.

Rasid et al., (2017) study titled: Risk Management, Performance Measurement, and Organizational Performance: A Conceptual Framework has recent global financial crisis in focus and corporate bankruptcy, stakeholders in the entity monitored the main risks facing the organization to ensure the value of the stakeholders was maintained and enhanced.

**RESEARCH METHODOLOGY**

The study surveyed 273 managers and workers from the aforementioned construction companies made up the study's population. The 280-person population was divided into smaller subsamples using the sample size determination table created by Krejcie and Morgan (cited in Kenpro, 2012). Approximately 122 (162) individuals make up this subset. Since SPSS Version 22 analyzes and analyzes the data obtained from the research instrument, it was utilized to summarize, code, edit, and tabulate data from the completed questionnaire. In the analysis, the following regression strategy was adopted: $Y = a + b_1X_1 + b_2X_2 + \varepsilon$

Where:
- $Y$ = Dependent variable that is Employee performance
- $a$ = Constant
- $b_1$ - $b_2$ = Regression Coefficient
- $X_1$ = Monitoring and Evaluation
- $X_2$ = Risk Management
- $\varepsilon$ = Error term
RESULTS AND DISCUSSION

A survey was conducted among project managers and staff of China Civil Engineering Construction Company, Setraco, and Julius Berger Construction Company in Delta State, with a total of 169 questionnaires administered. A total of 158 copies, accounting for 93.49% of the total, were successfully recovered and correctly filled out, whilst 11 copies, representing 6.51%, were not returned. The sample size for the research consisted of 158 respondents. The provided answer demonstrates a high level of quality and is indicative of the overall population. It aligns with the guidelines set out by Cooper and Schindler (2014). The researchers evidenced that, 50% is sufficient for analysis and reporting. A response rate of 60% is considered good, while a rate of 70% or more is deemed exceptional. 158 respondents which accounted for 93.49% of the overall sample size.

Results aimed to ascertain covered the demographic attributes, including gender, marital status, organizational affiliation, age, work experience, and managerial level. The study revealed that 32.28% of the respondents identified as male, whilst 67.72% of the respondents identified as female. The results indicated that the participants were fairly dispersed in terms of gender, with a little higher proportion of female responses compared to male respondents. Furthermore, it should be noted that, most respondents are married. The aforementioned group included 48.73% (77) of the individuals who responded to the surveys. In a similar vein, substantial score of 82, accounting for 51.90% of the total replies. The aforementioned category included 43.67% of the participants that responded to the surveys. In a similar vein, the predominant demographic among respondents who completed the questionnaire is comprised of staff members with 0-5 years of work experience, accounting for around 73.42% of the overall sample.

Data Analysis

In this study, descriptive statistics were utilized to provide a comprehensive and accurate depiction of M&E and RM, and OP. The descriptive statistics encompassed measures such as the minimum, maximum, mean, and standard deviation.

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>M&amp;E</td>
<td>158</td>
<td>12</td>
<td>20</td>
<td>16.89</td>
<td>1.967</td>
</tr>
<tr>
<td>RM</td>
<td>158</td>
<td>12</td>
<td>20</td>
<td>16.07</td>
<td>2.151</td>
</tr>
</tbody>
</table>


According to the data shown in Table 1, the descriptive statistics for M&E reveal a mean value of 16.89 and a standard deviation of 1.967. Additionally, the range between the highest and lowest values is reported to be 8. This suggests that, M&E is a significant approach in project management for China Civil Engineering Construction Company, Setraco, and Julius Berger Construction Company in Delta State, as shown by the mean value being bigger than the standard deviation value.

In a similar vein, the descriptive statistics pertaining to RM revealed a mean value of 16.07 and a standard deviation of 2.151. Furthermore, the range, defined as the gap between the highest and lowest values, was observed to be 8. This suggests that Risk Management (RM) is a prominent strategy utilized by China Civil Engineering Construction Company, Setraco, and Julius Berger Construction Company, as seen by the mean value being bigger than the standard deviation value.
Correlation Analysis
This section provides an analysis of the correlation between the explanatory factors and the explained variable. Table 2 presents the correlation analysis between the regressed: OP, and the regressors: M&E and RM.

Table 2
The Correlation Matrix for the Variables under Study

<table>
<thead>
<tr>
<th>Pearson Correlation</th>
<th>EP</th>
<th>M&amp;E</th>
<th>RM</th>
</tr>
</thead>
<tbody>
<tr>
<td>OP</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M&amp;E</td>
<td>.114</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>RM</td>
<td>.120</td>
<td>.437</td>
<td>1.000</td>
</tr>
</tbody>
</table>


The correlation matrix presented in Table 2 displays the independent variables, namely M&E and Risk Management (RM), along with the dependent variable, OP. The matrix provides information on the correlation coefficients between these variables, as well as the nature of the relationships that exist among them.

Firstly, it is observed that M&E has a coefficient of \( r = 0.114 > 0.05 \), indicating a significant positive connection between M&E and OP. This suggests that the use of M&E practices will likely provide significant benefits for Organizational Performance (OP) within China Civil Engineering Construction Company, Setraco, and Julius Berger Construction Company in Delta State, Nigeria.

Additionally, it is worth noting that the coefficient of RM is \( r = 0.120 \), indicating a statistically significant positive association with OP. This suggests that enhancing the use of RM practices in the handling and management of projects will provide significant beneficial impacts on OP within China Civil Engineering Construction Company, Setraco, and Julius Berger Construction Company in Delta State, Nigeria.

Table 3
Multiple Regression Analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>9.351</td>
<td>1.525</td>
<td>6.132</td>
</tr>
<tr>
<td>M&amp;E</td>
<td>.121</td>
<td>.057</td>
<td>.119</td>
<td>2.123</td>
</tr>
<tr>
<td>RM</td>
<td>.075</td>
<td>.026</td>
<td>.074</td>
<td>2.885</td>
</tr>
</tbody>
</table>


Table 3, displayed above, presents the Coefficient table containing the significance levels for the measures of Diversity conflict strategy, specifically M&E and Risk Management (RM). These measures will now be utilized to test the hypotheses in order to determine whether a significant relationship exists between the independent variables (Monitoring and Evaluation and Risk Management) and the dependent variable (OP).

The present analysis aims to discuss the findings obtained from the study. According to the findings shown in Table 3, the p-value obtained for M&E is 0.003, which is considered statistically significant since it falls below the conventional threshold of 0.05 (5%). Additionally, this implies that the degree of confidence, as shown by the confidence interval, exceeds the permissible threshold of 95% by 4.7%. As a result, the alternative hypothesis is
supported, leading to the rejection of the null hypothesis (Ho1). This refutes the proposition that there is no statistically significant correlation between M&E and OP within China Civil Engineering Construction Company, Setraco, and Julius Berger Construction Company in Delta State, Nigeria. This suggests that a 1% increase in M&E is associated with an 11.9% improvement in EP. This is apparent based on the regression coefficient value (r) of 0.119. If the postulations of this theory are accurate and if there are certain human necessities that are imperative for both human advancement and societal equilibrium, then the resolution to conflicts arising from variety must include the capacity to establish a milieu wherein these necessities may be fulfilled by all sectors of society. This aligns with the results of Cleland and Ireland (2017), who discovered that the implementation of a well-defined M&E strategy significantly impacts organizational performance.

Table 3 also presents the computed p-value of 0.002 for Risk Management (RM), which is deemed significant since it falls below the conventional threshold of 0.05 (5%). Additionally, this implies that the degree of confidence, as shown by the confidence interval, exceeds the conventional threshold of 95% by 4.8%. Thus, we conclude that the alternate hypothesis is supported, leading us to reject the null hypothesis (Ho2) that posits the absence of a significant association between Risk Management (RM) and Organizational Performance (OP) in China Civil Engineering Construction Company, Setraco, and Julius Berger Construction Company in Delta State, Nigeria. This suggests that a 1% increase in Risk Management (RM) is associated with a 7.4% change in Organizational Performance (OP), as shown by a regression coefficient value (r) of 0.074. This statement aligns with the research conducted by Wasim Ullah (2021), which suggests that risk management has a significant impact on organizational performance. Specifically, it asserts that effective risk management allows organizations to exert control over uncertainties and effectively manage crises. This ability to predict and mitigate risks enables organizations to develop timely contingency plans, preventing potential financial losses and ultimately enhancing their overall performance.

Table 4
Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.976^a</td>
<td>.953</td>
<td>.950</td>
<td>.441</td>
<td>1.883</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), M&E, RM
b. Dependent Variable: OP


Table 5
ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>4</td>
<td>39.785</td>
<td>13.071</td>
<td>.000a</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>153</td>
<td>3.044</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>157</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: OP
b. Predictors: (Constant), M&E, RM


The model summary table, specifically Table 4, displays the correlation coefficient (R) of the regression analysis. The obtained value of 0.976 (98%) suggests a highly robust positive
association between the dependent variable, namely the Organizational Performance (OP) of China Civil Engineering Construction Company, Setraco, and Julius Berger Construction Company in Delta State, and the independent variables, namely M&E and Risk Management (RM). The coefficient of determination (R2) for the model is 95% (0.953), indicating that 95% of the variance in the dependent variable, Organizational Performance (OP), for China Civil Engineering Construction Company, Setraco, and Julius Berger Construction Company, can be accounted for by the independent variables, M&E and Risk Management (RM). The remaining 5% of the variance in the model is unexplained. The significant positive association is further corroborated by the R2 value of 95%. The adjusted R2 statistic quantifies the degree of goodness-of-fit of a model. This demonstrates the adequacy of the model's fit and provides a comprehensive understanding of the dependent variable in relation to the independent variables across 95 different perspectives. The remaining 5% is sometimes referred to as the error term, including any variables that go beyond the scope of the model. Based on the aforementioned analysis, it can be concluded that there is definitive evidence of serial or autocorrelation, as shown by the Durbin Watson computed value of 1.883, which falls below the threshold of "2".

Finally, the Anova Table 5 shown above displays the overall significance of the model, which is measured at 13.071, and the corresponding p-value is predicted to be 0.000. This finding suggests that the independent variables, namely M&E and Risk Management (RM), collectively influence the dependent variable, Organizational Performance (OP), in China Civil Engineering Construction Company, Setraco, and Julius Berger Construction Company in Delta State. This implies that the model employed in this study is robust and reliable. In conclusion, it can be inferred that the aforementioned points support the notion that the evidence presented

CONCLUSION AND RECOMMENDATIONS

The research results indicate that project management within the construction industry had a significant influence on the overall performance of organizations. The use of M&E practices has been shown to have a positive and substantial influence on organizational performance (OP). Therefore, it is advisable for construction companies to retain and expand compromised strategy channels, as they have shown the ability to enhance staff performance, therefore contributing to the enhanced functioning of banks.

The favorable impact of Risk Management (RM) on Organizational Performance has been observed. Based on the available data, it can be seen that the dominating strategy has played a noteworthy role in enhancing staff performance within the Nigerian banking sector.

The following recommendations are suggested:

Based on the results obtained, the research proposes the following recommendations.

1. The methodical use of project management methods throughout the project cycle, from commencement to the closeout stage, in construction enterprises is essential for achieving enhanced advantages.

2. It is advisable to prioritize the organization of project management methods based on their effect and influence. The prioritization of project cost management is crucial owing to its significant impact on project outcomes and subsequent organizational success. There should be a greater focus on the implementation of strategies for effective communication and risk management throughout project execution.
3. Additional performance indicators that have been produced in recent research studies, such as the benefits to end users and the benefits to national infrastructure, should be considered for inclusion in performance measurement. In light of this, it is important to note that the initiatives should not be only focused on organizational objectives, but rather should aim to provide value to all relevant stakeholders.

4. Organizations should prioritize the use of risk analysis tools, since they are closely linked to improved project management practices and ultimately lead to enhanced performance.

References


