

Project Management Practice and Organizational Performance of Selected Construction Firms in Delta State

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ABSTRACT

The study examined the effect of project management practice on organizational performance of construction firms in Delta State, Nigeria. The specific objectives are to; assess the extent to which project supervision influences organizational performance of construction firms in Delta State; to ascertain the extent to which risk management influences organizational performance of construction firms in Delta State; find the extent to which resource allocation influence organizational performance of construction firms in Delta State; and assess the extent to which external collaboration influence organizational performance of construction firms in Delta State. The cross-sectional survey research design was used in this study. The population of the study of 218, consists of the managers and staff of the selected construction firms. Data for the study were collected via primary and secondary sources, with the aid of a well-structured questionnaire instrument. Krejcie and Morgan table was used to determine the sample size of one hundred and thirty-six (136) and Bowley's formula was used to apportion the samples to each of the organizations used for the study. A stratified sampling technique was used. The study was driven by primary and secondary data. The data were analyzed using Pearson Correlation and regression analysis as analytical tools. The study adopted Management theory of change, system theory, agency theory and resource base view theory to explain and predict the relationship between studied variables. Findings revealed that project supervision has significant effects on organizational performance with ($\beta = 0.364, P < 0.00$), risk management has significant effects on organizational performance with ($\beta = 0.353, P = 0.004 < .05$), resource allocations have significant effects on organizational performance with ($\beta = 0.221, P=0.016 < .05$), external collaboration has significant effects on organizational performance with ($\beta = 0.468, P =$ that leading construction firms in this modern time are those with manager who have been able to disaggregate their organizations

into series of project whose performance is properly supervised before they are integrated into the system. Project portfolio management is the mainstay of successful leaders who cannot afford to drive whole organizations that are likely to go under. The study recommends firms should modify resource allocation procedure to ensure successful implementation of strategic plans. Implementation of strategies in the organization should be facilitated by lay down policies and regulations. To conserve the construction projects after its completion, the quality of materials used in construction projects must not be compromised. The study contributed to knowledge by providing deep insights on the importance of personal characteristics that may help drive business success in a difficult and constantly changing project environment.

Keywords: Project Management Practice, Project Supervision, Risk Management, External Collaboration, Resource Allocation, And Organizational Performance

I. Introduction

The drive by businesses for better opportunities for achieving competitive advantages in the market and capacity in any functional area to make the performance of the organization better is common nowadays. In recent times, most of the non-profit organizations are managing projects in a very complex environment. Development of new products, implementation of new policies and outsourcing, proper system of implementation and development are considered as the key project initiatives of an organization. For this purpose, implementation of projects in non-profit organizations and business entities is undertaken through using various practices of project management which are executed by different project managers every day. There could be many different objectives within a project which can be obtained on completion of the project. The capability to successfully complete implementation of a project is considered as the achievement of organizational

performance. Cost, time and quality are considered as most important objectives in all projects and all these factors are important to consider for analyzing the success of any project (Walker, 2015; Belassi and Tukel, 2016). Most of the project management practices are examined and experimented as they have been collected from the lessons and experiences which have been continuously practiced and developed to produce better results and thereafter, they are recognized and documented as the examples, measurements, and baselines for project management (Karim, 2018).

Those organizations which successfully execute their projects apply effective and practical project management practices as tools to obtain objectives and goals of the business. The strategic impact which successful projects have on organizations and business require effective management practices which measure risks and progress and to make sure that the right projects can be delivered by aligning organizational priorities to realize improved organizational performance. Cost, quality and time are considered the most important objectives which are crucial in all kinds of projects; furthermore, all these factors are essential to be considered in analyzing and measuring the successful implementation of any project (Belassi and Tukel, 1996; Walker, 1995).

Management is the process of implementing organizational objectives and planning for utilization of resources so as to achieve predetermined organizational goals. To achieve this, management provided a structure in which activities are identified, resources allocated, master routines are set, placements and procedures established to guide performance of duties. However, in this era of globalization sustainability overrides stability as organizations can no longer ignore the turbulence in external environment. Success of organizations today is determined by their ability to tap into the latest technology and adapting it to drive organizational processes to meet the ever-changing demands of their stakeholders. Project management practice integrates the project management process of initiation, planning, executing, monitoring, controlling and closing, progressively through the project life cycle with the aim of satisfying the stakeholders and constituents according to the project's established requirements. Stakeholders are those who have a direct stake in the project while the project's constituents are those who may be affected by the penalties of the project. Project success is typically created when the stakeholders and constituents show their collective fulfillment according to the extent of their involvement.

The management is expected to be on top of things to drive and even alter their customers taste by continuous improvement thereby surprising them with new services or products. With the advancement of technology, sophistication of customers and increasing emphasis on globalization managers seem to be searching for new approaches to management enterprises. The project management approach does well in creating, acquiring and transferring knowledge and modifying behavior to reflect new knowledge. While practitioners still assert that project management is a financial measure that cannot address complex issues associated with managing organizations, it underlines systematic problem solving, experimenting with new ideas, acquiring from experience of experts. Hence, this study is to explore how project management approach can be adopted to make organizations gain a competitive advantage which form the basis of this study.

Statement of Problem

Organizations embrace project management practice although its contribution to organizations' performance is not acknowledged outside the group of professionals who believe in it. Project management professionals have the difficult task of making senior executives aware of the benefit that further investment into raising project management maturity of their organizations can generate.

Within the sphere of a given project there are several project management activities. Several ways of carrying out these activities emerge and become accepted as day to day practices. The need to meet certain environmental and social challenges, as may be faced by a particular organization, may cause the adoption of certain project management practices. Personnel involved in project management may also adopt certain project management practices and stick to them for purposes which may however not relate to the project success.

Several practices are therefore carried out in the management of projects but not recognized as project management practices. For example, the study revealed that it has become a common practice in the management of most riverine projects, where adoption of riverine transportation cost especially at the watersides in the area of loading and offloading of project material, settlement of community or appointment of community relation Liaising officers for efficient project coordination, and meeting and solving certain environmental and social challenges that emerges before, during and after the commencement

of the process and activities in execution of the project. The need to obtain successful projects calls for the need to also undertake optimum practices. Performance of group of projects managed by an organization may differ from performance of another group of projects with similar characteristics but managed by another organization. The kind of project management practices carried out by the different organizations for achieving project success may also influence variation in the performance of the projects. The significance of such differences in performance of the groups of projects is therefore necessary for determination of the characteristics of influential project management practices. There would therefore be the need to promote optimum practices and a second look taken at others that confront the process and success of any projects.

Objectives of the study

The objectives of the study are as follows

- I To assess the extent to which project supervision influences organizational performance of construction firms in Delta State.
- ii To ascertain the extent to which risk management influences organizational performance of construction firms in Delta State.
- iii To examine the extent to which resource allocation influence organizational performance of construction firms in Delta State.
- iv To determine the extent to which external collaboration influence organizational performance of construction firms in Delta State.

Research Questions

The research questions for the study are;

- i.what is the effect of project supervision on organizational performance of construction firms in Delta State?
- ii.what is the effect of risk management on organizational performance of construction firms in Delta State?
- iii.what is the effect of resource allocation on organizational performance of construction firms in Delta State?
- iv.does external collaboration affect organizational performance of construction firms in Delta State?

Statement of the Hypotheses

The following are the hypotheses for the study

Ho₁: Project supervision has no significant effects on organizational performance of construction firms in Delta State.

Ho₂: There is no significant effects of Risk management on organizational performance of construction firms in Delta State.

Ho₃: Resource Allocation has no significant effects on organizational performance of construction firms in Delta State.

Ho₄: There is no significant effects of External Collaboration on organizational performance of construction firms in Delta State.

II. REVIEW OF RELATED LITERATURE

2.1 Conceptual Review

2.1.1 Project Management Practice

Project management has gradually been a strategy used by organizations to build their plans to attain their goals. Since the beginning of the 2000s, project management (PM) and its matters have been developing relevance in a more precise way, even being accepted as organizational model (Carvalho, 2017). This new inclination has become strong to create a new group of organizations, composed by those that handle all or almost every organizational doing by projects: project-based organizations (Project Management Institute, 2013). Considering this new state faced by most of the recent firms, their managers also need to be much involved to achieve success in project management.

The kind of construction is such that the manager often acts quickly on his own initiative, and it is required that he be empowered to do so. To be effective, he must have full power, knowledge and experience of the job and be the one voice that talks for the project. Project management is a task of executive leadership and offers the cohesive force that binds together the different elements into a team effort for project completion. Huge projects normally will have a full-time project manager who is a delegate of the firm's top management or who accounts to a senior executive of the company.

Projects are organizational activities and they arise in organizations for several reasons, such as market demands, strategic opportunities or needs, technological advances, and legal requirements. They have a direct effect on the organization's results. For this reason, projects, project performance, and their antecedents are still the frequent subject of research. Much of project performance can be attributed to the personal characteristics of the project manager (PM). Some theorists emphasize that behavioral aspects associated with the PM, such as attitudes, are related to project performance. However, there is no consensus or uniformity in regard to the methods of measuring the PM's personal characteristics.

Organizational Performance

Organizational performance encompasses three specific areas of firm outcomes: (a) financial performance (profits, return on assets, return on investment, etc.); (b) product market performance (sales, market share, etc.); and (c) shareholder return (total shareholder return, economic value added, etc.). Return on sales is a measure of a company's profitability, equal to a fiscal year's pre-tax income divided by total sales (Funda and Cihan, 2014). Return on assets (ROA) is an indicator of how profitable a company is relative to its total assets. ROA gives an idea as to how efficient management is at using its assets to generate earnings. Calculated by dividing a company's annual earnings by its total assets, ROA is displayed as a percentage. Overall profitability is company's ability to generate revenues in excess of the costs incurred in producing those revenues.

Organizational performance is an organization's ability to achieve its goals by using resources in an efficient and effective manner (Daft and Marcic, 2018). In this view, achieving superior organizational performance is not a question of luck as it must be determined through strategic leaders' practices (Daft, 2011). Any challenge facing organizations require strategic leaders to make the vital decision on how to move about it. Organizational performance has been a major concern for scholars, practitioners, and organizations of all kinds. In view of this, Nganga (2019) observes that strategic leadership and corporate performance represent two sides of the same coin. Strategic leadership is essential in enabling organizations to compete in the competitive 21st-century, then organizational performance is equally important. Further, Nganga (2019) notes that the major reason for the failure of efforts to achieve the firm's planned profitability and growth are that many firms do not recognize the strategic leadership capacity that new goals require.

Project Supervision and organizational performance

Most scholars of organization project supervision argue that planning for supervision should be done just at the very point of organization planning (Kohli and Chitkara, 2018) while a few contend that it should be created after the planning phase but before the design phase of an organization or intervention (Nyonje *et al.*, 2012). Despite this difference in opinion however, almost all scholars agree that the plan should include information on how organization should be assessed (Cleland and Ireland, 2017) of great importance to this study, is what the project supervision plan outlines that

influences organization performance. From the studies reviewed, it has been noted that a project supervision plan generally outlines the underlying assumptions on which the achievement of organization goals depends, the anticipated relationships between activities, outputs, and outcomes- the logical framework. Other contents of a project supervision plan are well-defined conceptual measures and definitions, along with baseline data needed; the monitoring schedule; a list of data sources to be used; and cost estimates for the monitoring and evaluation activities. Most plans also include a list of the partnerships and collaborations that will help achieve the desired results; and a plan for the dissemination and utilization of the information gained (Olive, 2002; Wysocki and McGary, 2013; Mackay 2017). This demonstrates that planning for project supervision takes care of all aspects that need to be in place so that there is early detection of progress or lack thereof.

Literature also reveals that there are important considerations for a project supervision plan: Brignall and Modell (2010) categorizes these considerations into resources - how much money and time will be needed to conduct the activities. Capacity - does the organization have internal capacity to carry out the proposed monitoring and evaluation activities; including analysis of data collected? Other considerations made and also acknowledged by Armstrong and Baron (2012) are Feasibility- Are the proposed activities realistic? Can they be implemented? Timeline - Is the proposed timeline realistic for conducting the proposed activities? Ethics -What are the ethical considerations and challenges involved with implementing the proposed activities, and is there a plan in place for addressing those considerations? Has a protocol been submitted for review to a research ethics committee? With these considerations, it can be said that project supervision is complete in terms of coverage for the purposes of giving an oversight on organization direction during implementation.

Risk Management and organizational Performance

Risk management has always been a focal point for finance enthusiasts since the beginning of the industrial revolution (Dima and Orzea, 2014). Risk management affects the decision-making process and hence corporate governance as well. Recent financial crises point to the need for some forms of risk management strategies for deposit money banks. Financial failure is hardly a new phenomenon, but the rapidity with which

organizations get into trouble in recent years is new. For example, Toshiba Chief Executive just resigned over earnings management scandal amounting to \$1.2 billion over a period of 6 years. Microsoft, the software giant recorded \$3.2 billion second quarter loss. Though Apple second quarter profits went up by \$10.5 billion, the market price falls by 7%. The 2008 savings and loans crises in the United States spilled over the world. Five deposit money banks in Nigeria were taken over by the government-owned Asset Management Company (AMCO). This action was taken following the initial N400 billion bailout by the Central Bank of Nigeria (CBN) to prevent the collapse of the banking sector. Competition in the banking sector has not help matters. The dog eats dog attitude of banks is typically seen as detrimental to financial system stability (FSS). The basic idea is that when banks compete intensely for deposits, interest rates fall and their franchise value is eroded. Banks have then less to lose from a default and their incentives to take on risk increase. This argument has been very important in shaping banking regulation around the world, for instance in the form of competition, merger and recapitalization policies.

Studies on the relationship between risk management and organizational performance of banks mostly have been conceptual in nature, often drawing the theoretical link between good risk management practices and improved bank performance. Schroeck (2002) and Nocco and Stulz (2006) stress the importance of good risks management 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. The study suggests that prudent risks management is important in reducing the bankruptcy costs. Additionally, there are potential benefits that risk management could also reduce taxes. Several other studies draw the link between good risk management practices with improved financial performances (Smith, 1995; Schroeck, 2002). In particular, these studies propose that prudent risk management practices reduce the volatility in banks' financial performance, namely operating income, earnings, firm's market value, share return and return on equity. Schroeck (2002) proposes that

ensuring best practices through prudent risk management result in increased earnings.

Resource Allocation and organizational Performance

Ganley (2010) states that resources make organizations to run effectively, and allocating these resources to an organization should be done carefully. Allocating these resources can be tough, but an organization can acquire the resources they need appropriately through careful practice. Some examples of organizational resources are technology, people, and finances. All of these organizational resources are crucial to the success and growth of an institution. Murithi (2009) states that resources are needed for the successful implementation of strategic plan and strategies. It is very difficult to implement a strategy when resources are not available. Resources will include the human resources, time frame, remuneration, and finances in terms of sufficient funds. Resources have to be available for strategy implementation.

Omollo, Ngacho and Yambo (2017) researched on impact of allocation of resources on organization performance of Sonny sugar company limited, Kenya. The study employed descriptive research design. The 994 workers were the target area of interest. The performance of sonny Sugar Company was found to be influenced by resource allocation. Furthermore organization performance was found to be improved through perfection of resource allocation. Findings concluded that modification of resource allocation procedure was found to ensure successful implementation of strategic plans. Implementation of strategies in the organization was facilitated by state policies and regulations.

Lemarleni, Ochieng, Gakobo and Mwaura (2017) investigated on allocation of resources and implementation of strategies in Kenya Police Service in Nairobi County. The research employed descriptive research design. The area of interest was 56 senior police officers working in 13 police divisions. The study findings revealed that there is improper implementation of services dues to poor resource allocation practices. The poor allocation is as a result of the extreme bureaucracy involved. As a result, the reform process in the policies services is slow due to inadequate delivery of services resulted through poor implementation of strategies as a result of inadequate allocation of resources. The research further indicated that poor implementation of strategy is as a result of inadequate human resource empowerment.

External Collaboration and Organizational Performance

External collaboration refers to the collaborative relationships based on contracts, formal agreements, and formal transactions between firms and their external partners (Santoro, Bresciani, & Papa 2020). The main forms of formal external collaboration include collaboration based on contracts between the focal firm and its partners, venture investment, joint ventures, mergers and acquisitions, technology licensing, and patent purchase (Hoang, Rothaermel, 2010; Grindley & Teece, 2019). We suggest that formal external collaboration has a positive impact on innovation performance of Firms. First, from the knowledge-based view, formal external collaboration can broaden Firms' knowledge base. It helps Firms keep formal and stable collaborative relationships with external sources, and Firms can acquire a lot of complementary knowledge and resources through these collaborative relationships (Parida, Westerberg & Frishammar, 2012). Therefore, through formal external collaboration with outside organizations, both the amount and diversity of knowledge owned by Firms can be increased, and Firms' knowledge base can become more abundant (Singh, Kryscynski, Li, & Gopal, 2016). An abundant knowledge base can promote the integration of external knowledge, the creation of new ideas, and then it can enhance Firms' innovation performance. Besides, Firms with a broad knowledge base tend to be more sensitive towards external market opportunities. When faced with a dynamic market environment, Firms with a broad knowledge base are more likely to perceive and seize new business opportunities, and achieve radical innovation.

Moreover, establishing formal external collaboration relationships with external partner's helps

Firms reduce R&D expenditure, decrease the costs and risks of innovation, enhance innovation efficiency, and finally promote the improvement of innovation performance. Innovation activities usually need a lot of inputs such as capital and human resources; however, the uncertainty and failure rate of innovation is high. Therefore, the costs and risks of innovation is too high for Firms to Faems *et al.*, (2005) based on the data collected from Belgian manufacturing firms suggest that there is a positive relationship between a firm's innovation performance and its inter-organizational collaborations. Huang and Yu (2011) find that, among Taiwanese firms in the information and communication technology industry, both competitive and non-competitive collaborations have positive effect on firm innovation performance. The impact of external collaboration differs according to the type of innovation. Un and Asakawa (2015) find out that R&D collaboration with suppliers and universities have a positive impact over process innovations but other types of collaborations do not have a significant or positive impact. External collaborations support firms in their innovation activities.

III. RESEARCH METHODOLOGY

The research design method adopted for this study was survey research design method, the descriptive survey research design method was adopted, The population of the study comprises of major civil engineering construction firms which includes China Civil Engineering Construction Company (CCECC), Setraco Construction Firms and Julius Berger and their employees. the population figure is estimated at two hundred and eighteen (218) employees of the selected firms.

Table 1, Distribution of the Population

S/N	Names of Firms	Population Per Firm	Location
1	China Civil Engineering Construction company	80	Asaba, Ughelli
2	Julius Berger	70	Warri
3	Setraco Nigeria Limited	68	Ughelli, Warri
	Total	218	

Source: Researcher's Field Survey (2025)

The sample size of the study was determine using the Krejcie and Morgan as cited by Olannye (2017) which provided a table for determining sample size from a given population. From the table, a sample size of 136 employees used based on the population of the study. To allocate the sample size of 136 to the firms and their location, the study adopts the stratified sampling method, the Bowley's

proportional allocation formula was applied. The formula is as stated below

$$n_h = n \frac{N_h}{N}$$

Where:

n_h = Number of units allocated to each firm

N_h	=	Number of employees in each firm stratum in the population	Julius Berger	
n	=	Total sample	$n_h = 70 * 136$	
N	=	The total population size under study	218	= 44
China Civil Engineering Construction Company				
$n_h = 80 * 136$			$n_h = 68 * 136$	
218		= 50	218	= 42

Table 2 Sample Size Distribution

S/N	Names of Firms	Sample Size Per Firm	Location
1	China Civil Engineering Construction company	50	Asaba, Ughelli
2	Julius Berger	44	Warri
3	Setraco Nigeria Limited	42	Ughelli, Warri
	Total	136	

Source: Researcher’s Field Survey (2025)

The stratified sampling technique was adopted for the study. Data were collected through primary sources. The descriptive statistics, Pearson correlation and multiple regression analytical tools were used for the analysis of data. The hypotheses stated for this study were tested using multiple regression analysis.

ANALYSIS OF DATA

Response rate is one of the survey elements that researchers are concerned about when they administer questionnaires. It is very important that

they receive a suitable number of responses to be able to carry out subsequent analysis. Response rate consists of the number of completed, returned and accepted copies of questionnaire divided by the total copies of questionnaire administered (Rada, 2005). Therefore, it is an indicator of the confidence that can be derived from using the survey method to obtain data. Some researchers have argued that a low response rate can affect the reliability of any study, thus researchers should do everything to increase the response rate (Boyd & Marsden, 2003).

Table 3. Analysis of response pattern

Item	Questionnaire	Percentage (%)
Total number of questionnaires administered	136	100
Number of questionnaires retrieved	96	71
Number of questionnaires not retrieved	40	29
Number of questionnaire suitable for analysis	96	71

Source: computed from field survey data, 2025.

The response rate for this study was 71% as shown in Table 3. This remarkable number achieved for response rate may not be unconnected with the approach the researcher used in administering the questionnaire to respondents at their monthly gathering as it was properly explained to them before filling. One hundred and thirty-six (136) copies of a single questionnaire were administered to respondents, out of which ninety-six (96) representing seventy-one (71%) were retrieved

while forty (40) representing (29%) were not returned. After assessing the retrieved questionnaire through data preparation, hence, only seventy-one (71%) copies of the questionnaire were usable to achieve the study objectives and testing hypotheses.

4.1.2 Demographic characteristics of the respondents

Descriptive analysis was conducted on the demographic characteristics of CEOs, project

managers and other project management teams of the selected construction firms in Delta State. The result of the respondents' demographic profile such as gender, age category, marital status, family

members involved in the business, position occupied in the firm and age of the firm are presented from table 4 to table 5

Table 4. Gender distribution of respondents

Gender	Frequency	Percentage (%)
Male	90	94
Female	6	6
Total	96	100

Source: field survey data, 2025.

From the results of the demographic information of respondents in Table 4, it was observed that respondents were made up of 90 males, representing 94% of total respondents, while 6 respondents were females, representing 6% of

total respondents. This is an indication that the male folks are much involved as project managers of construction firms being accessed than their female counterpart.

Table 5. Age categorization of respondents

Age grouping	Frequency	Percentage (%)
18-28 years	-	-
29-39 years	29	30
40-50 years	40	42
Above 50 years	27	28
Total	96	100

Source: field survey data, 2025.

From Table 4, the age distribution of respondents which was spread across age categories shows that the highest concentration of age fell within the age bracket of 40-50 years 40(42%) of respondents. This is followed by the age range of

above 50 years 27(28%), while those that are 29-39 years of age 29(30%) made up the least of total respondents. This clearly shows that the project managers are concentrated with individuals in an active age in organizing business.

Table 6. Marital status of respondents

Marital status	Frequency	Percentage (%)
Single	12	13
Married	76	79
Widowed	6	6
Divorced	2	2
Total	96	100

Source: field survey data, 2025.

It can be observed from table 6, that about half of the respondents (79%) are in a conjugal relationship, while 12 representing 13% of the total respondents are not married. 8 respondents are not so lucky with marital relationship due to the fact that they are either widowed or divorced.

Table 7. Educational qualification distributions of respondents

Educational qualification	Frequency	Percentage (%)
WAEC	-	-
OND	-	-
HND/B.Sc	16	16
MBA/Masters	67	70
Ph.D	13	14
Total	96	100

Source: field survey data, 2025.

In terms of educational qualifications obtained, 96 respondents representing 100% of the total number are graduates. This is a proof that attaining higher educational certificate is some major requirements in being a project manager of construction firms in Delta State.

Table 8. How long have you been a project manager

Job title	Frequency	Percentage (%)
1-5 Years	-	-
6-10 Years	8	8
11-15 Years	50	52
16-20 Years	24	25
21 Years and above	14	15
Total	96	100

Source: field survey data, 2025.

With respect to job title, it was observed 50 of the respondents representing 52% had been project managers for 11-15 years, while 24 of the respondents representing 25% have been project managers for 16-20 years and 14(15%) has been managers for 21 years and above acting as project managers.

Analysis of Research Questions Data

This section focuses on the analyses of responses to the 5 major research questions which were broken down into twenty-six (26) sub questions using the Likert scale of point 5. specifically; they are analyzed using descriptive statistics, and regression analysis.

Table 9. project Supervision and Organizational Performance

S/N	Questionnaire items	Scale				
		SA (5)	A (4)	U (3)	D (2)	SD (1)
1	To what extent does project supervision create bottle neck for Project management objectives	44 (45.8)	25 (26)	19 (19.9)	8 (8.3)	
2	My company applies project supervision practices of projects which leads to increase in performance and meeting up to time schedule for project works	31 (32.3)	37 (38.5)	28 (29.2)	-	-
3	My company's inculcate processes involved in project supervision of projects which leads to appropriate distribution tasks and responsibilities to enhance performance?	36 (37.5)	35 (36.5)	25 (26.0)	-	-
4	I am good at ensuring efficient project supervision which tends to allows a firm to have excellent commitment when it comes	23 (24.0)	26 (27.1)	15 (15.6)	18 (18.8)	14 (14.6)

Source: computed from field survey data, 2025.

The descriptive pattern of responses in Table 9, for project supervision sub-scale on the first questionnaire items shows that overwhelming number of respondents, 69(71.8%) of the total respondents agree to the question (project supervision create bottle neck for Project management objectives, 19(19.9%) were undecided while 8(8.3%) disagree to it. With respect to the second question, majority of the respondents 68(70.8%) answered affirmatively that their company applies project supervision of projects

which leads to increase in performance and meeting up to time schedule for project works, while 28(29.2%) could not make a choice.

On the third item on project supervision sub-scale, majority of the total respondents 71(74%) agree that their company's inculcate processes involved in project supervision of projects which leads to appropriate distribution tasks and responsibilities to enhance performance, while 25(26%) were undecided. When asked of their efficient project supervision tends to allows a firm

to have excellent commitment when it comes 49 (51.1%) of sampled employees concur to the

statement, 32(33.4%) disagree to it while only 15 (15.6%) respondents were undecided.

Table 10. Risk management and Organizational Performance

S/N	Questionnaire items	Scale				
		SA (5)	A (4)	U (3)	D (2)	SD (1)
5	Applying efficient risk management is actually necessary in an organization for project management effectiveness which in turn affects performance	45 (46.9)	20 (20.8)	18 (18.8)	8 (8.3)	5 (5.2)
6	My company ensures that risk management and behavior of the project manager have effect in building a cohesive team for project management	56 (58.3)	22 (22.9)	12 (12.5)	6 (6.3)	-
7	The actuality of individual characters of team members' impact in building a cohesive team for project management and allow efficient growth of an organization.	43 (44.8)	32 (33.3)	9 (9.4)	6 (6.3)	6 (6.3)
8	My company's believe that team members' on organizational impact on building a cohesive team for project management?	23 (24.0)	43 (44.8)	19 (19.8)	5 (5.2)	6 (6.3)

Source: computed from field survey data, 2025.

The descriptive pattern of responses in Table 10, for risk management sub-scale indicated that on the first questionnaire item, 65 (67.7%) of the total respondents agree largely to the construct (Applying efficient risk management is actually necessary in an organization for project management effectiveness which in turn affects performance), 18(18.8%) were undecided while 13(13.5%) disagreed to it

On the second item, 78 (81.2%) of the total respondents agree that their company ensures that risk management and behavior of the project manager have effect in building a cohesive team for project management, 6 (6.3%) hold contrary opinion while 12(12.5) could not make a choice on the issue.

With regards to the third question, 75 (78.1%) of the sampled individuals concur to the statement (The actuality of individual characters of team members' impact in building a cohesive team for project management and allow efficient growth of an organization.), 9 (9.4%) were undecided, while 12(12.6%) of the total respondents disagreed. Also fourth statement shows that 66 (68.8%) of the sampled individuals concur to the statement (company's believe that team members' on organizational impact on building a cohesive team for project management.), 19 (19.8%) were undecided, while 11(11.5%) of the total respondents disagreed

Table 11. Resource Allocation and Organizational Performance

S/N	Questionnaire items	Scale				
		SA (5)	A (4)	U (3)	D (2)	SD (1)
9	Resource Allocation is a major contributor to organization success	31 (32.3)	49 (51.0)	16 (16.7)	-	-
10	Resource Allocation is necessary at the planning phase for effective execution of projects to ensure performance.	35 (36.5)	27 (28.1)	17 (17.7)	9 (9.4)	8 (8.3)
11	In resource allocation, engaging skilled and capable manpower are more vital than deploying the needed machinery for performance	24 (25.0)	34 (35.4)	20 (20.8)	11 (11.5)	7 (7.3)
12	Resource allocation is a veritable tools in project management in driving organizational performance.	39 (40.6)	27 (28.1)	21 (21.9)	6 (6.3)	3 (3.1)

Source: computed from field survey data, 2025.

The descriptive pattern of responses in Table 11, for resource allocation sub-scale indicated that on the tenth questionnaire item, 80 (83.3%) of the total respondents agree to the question (Resource Allocation is a major contributor to organization success) while the rest 16(16.7%) were undecided

When asked if Resource Allocation is necessary at the planning phase for effective execution of projects to ensure performance 62(64.6%) of the total sampled employees concur to the statement, 17(17.7%) hold a contrary opinion and the remaining 17 (17.7%) could not provide an answer.

On the third item of the proactive orientation sub-scale that Is resource allocation, engaging skilled and capable manpower are more vital than deploying the needed machinery for performance 58 (60.4%) of the total respondents agree to it, 18(18.8%) disagree to it while 20(20.8%) could not come up with a decision.

With respect to the thirteenth question on the questionnaire, majority 66(68.7%) of the total respondents concur that Resource allocation is a veritable tool in project management in driving organizational performance, while 9(9.4%) disagreed on the statement.

Table 12. Eternal collaboration and organizational performance

S/N	Questionnaire items	Scale				
		SA (5)	A (4)	U (3)	D (2)	SD (1)
13	External collaboration can impact negatively on Project management.	22 (22.9)	39 (40.6)	26 (27.1)	6 (6.3)	3 (3.1)
14	External collaboration create more bottle necks than internal stake-holders in effectiveness of firms.	35 (36.5)	38 (39.6)	17 (17.7)	3 (3.1)	3 (3.1)
15	For project management effectiveness, stake-holder’s management should be a one-off; at the kick-off meeting.	39 (40.6)	43 (44.8)	14 (14.6)	-	-
16	External collaboration demands are insatiable and as such, their agitations are seen as distractions to project management.	38 (39.6)	37 (38.5)	17 (17.7)	4 (4.2)	-

Source: computed from field survey data, 2025.

The descriptive pattern of responses in Table 12, for external collaboration sub-scale indicated that on the thirteen-questionnaire item, 61 (63.5%) of the total respondents agree to the construct about 9 (9.4%) disagree to it while 26(27.1%) could not make a choice.

On the second item on the sub-scale that external collaboration creates more bottle necks than internal stake-holders in effectiveness of firms, 73(76.1%) of the total respondents concur to it while the remaining 17 (17.7%) were undecided and 6(6.2%) disagree With regards to the fifteen question on the questionnaire, majority 82 (85.4%) of the total individuals sampled agree that ex for project management effectiveness, stake-holder’s management should be a one-off; at the kick-off meeting 14(14.6%) were undecided.

On the statement External collaboration demands are insatiable and as such, their agitations are seen as distractions to project management, 75(78.1%) of the total respondents answered in

affirmative 17(17.7%) were undecided while 4 (4.2%) disagree.

Multiple Regression Analysis

Multiple regression analysis is a family of techniques used to explore the relationship between one continuous dependent variables and a number of independent variables or predictors. It can be employed in addressing series of research questions. It can also establish that a set of independent variables explains a proportion of the variation in a dependent variable at a significant level (Pallant, 2005). To determine the effect indicators of project management experts on organizational performance among selected construction firms in Delta State, multiple regression was conducted between organizational performance (dependent variable) and supervision, risk management, resource allocation and external collaboration as the (independent variable) using sample data from field survey. The results are shown in Table 14, and Table 15

Table13. Model summary of multiple regression analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.646 ^a	.418	.409	3.04315

a. Predictors: (Constant), PS, RM, RA, EC

Source: SPSS output of field survey data, 2025.

As shown in table 4.14, the R² (coefficient of determination) value of 0.41 shows that 41% of variance in firm performance is accounted for by the joint predictive power of project supervision, risk management, resource allocation and external collaboration while the remaining percentage is explained by factors outside the model.

Table 14, Multiple regression analysis of variance (ANOVA)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2189.574	5	370.785	35.923	.000 ^b
	Residual	3047.507	227	9.271		
	Total	5237.081	232			

a. Dependent Variable: OPer
 b. Predictors: (Constant), PS, RM, RA, EC

Source: SPSS output of field survey data, 2025.

The ANOVA Table 14, (F=(4, 162)35.923, P < 0.01) indicates that the overall regression model is statistically significant and fits to the data well. In other words, it tells us that the model allows us to predict organizational performance at a rate better than chance.

Table 15. Multiple regression coefficients analysis

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	7.155	.463		15.454	.000
	Project Supervision	.405	.131	.364	3.105	.000
	Risk Management	.394	.132	.353	2.990	.004
	Resource Allocation	.314	.174	.221	1.802	.016
	External Collaboration	.494	.057	.468	8.625	.000

a. Dependent Variable: Organizational Performance

Source: SPSS output of field survey data, 2025

The results in table 16, above show that the four dimensions of project management have positive effects on organizational performance. However, Supervision, risk management, resource allocation and external collaboration are significant predictors of organizational performance. The relative importance of the significant predictors was determined by the size of standardized beta coefficient. According to Tabachnick and Fidell (2001) beta weight is useful because it uses a unit of measurement that is same for all variables. On this note, External collaboration is the most important

predictor of organizational performance ($\beta = 0.468$ P < 0.01), followed project supervision ($\beta = .364$, P < 0.01).The equation of the regression model for predicting any level for organizational performance becomes; **OPer** = 7.155 + 0.40PS+ 0.394RM+ 0.314RA+ 0.494EC+ 3.04315

Test of Research Hypotheses

Hypothesis one

Hypothesis1 (HO1): Project supervision has no significant effects on organizational performance of construction firms in Delta State.

Based on the results, project supervision has a positive effect which is statistically significant on organizational performance ($\beta=0.364$ $P < 0.01$). The beta value of 0.364 implies that unit increase in project supervision variable will result in a 0.364 increase in organizational performance and vice versa.

The p value of .000 is significant and more than the acceptable 95% confidence interval. Thus, **the null hypothesis (Ho₁) is rejected and the alternate hypothesis is accepted.** This implies that sample data provided convincing evidence or proof on the claim that there is significant positive relationship between project supervision and organizational performance.

Hypothesis two

Hypothesis 2 (Ho₂): Risk management has no significant effect on organizational performance of selected construction firms in Delta State.

From the regression result, risk management has a positive and statistically significant effect on organizational performance ($\beta=.353$, $P < 0.01$). The beta coefficient of 0.353 implies that if risk management decreases by one unit, organizational performance will also decrease by 0.353 and vice versa, statistically controlling for the effect of other independent variables. The p value of .004 is significant and more than the acceptable 95% confidence interval. Thus, **the null hypothesis (Ho₂) is rejected and the alternate hypothesis is accepted.** This implies that sample data provided convincing evidence that there is significant positive relationship between risk management and organizational performance.

Hypothesis three

Hypothesis 3 (Ho₃): Resource allocation has no significant effects on organizational performance selected construction firms in Delta State.

From the regression result, the beta coefficient of resource allocation provides evidence of positive association between resource allocation and organizational performance ($\beta =0.221$ $P < 0.01$). Conversely, the calculated p value shows it is insignificant. According to Tabachnick and Fidell (2001), a significance level between 0.05 and 0.10 can be considered marginal. Therefore, since proactive orientation p value is .016, it is fairly good at predicting firm performance. However, based on the decision rule the p value of .076 (7.6%) is greater than .05 level of significance. This implies that there is no statistically significant positive relationship between resource allocation and organizational performance because sample data has failed to disprove the claim. Therefore, **the null**

hypothesis (Ho₃) is rejected while the alternate is accepted.

Hypothesis four

Hypothesis 4 (Ho₄): There are no significant effects of External Collaboration on organizational performance of construction firms in Delta State.

The result of multiple regression analysis, also revealed that environmental Factors exert positive and statistically significant effect on organizational performance ($\beta =0.468$ $P < 0.01$). In fact, external collaboration wields the strongest effect on the dependent variable. Since

the calculated p value recorded (0.00) is less than the critical value of 0.05. **The null hypothesis (Ho₂) is rejected and the alternate hypothesis accepted.** This implies that there is a statistically significant positive relationship between External collaboration and organizational performance.

IV. Findings

The results of the descriptive statistics on respondents' demographic characteristics provide valuable information. The males are much more involved in project management than their female counterpart in Delta State as 94% of total respondents were male. The highest concentration of age fell within the age bracket of 40-50 years 40(42%) of respondents while majority of respondents 86 (89.4%) confirmed that individual(s) with whom they have familial relationship with is engaged in the project management. The descriptive statistics on the research questions revealed that majority of the respondents overwhelmingly responded in agreement to statements on the various indicators of entrepreneurial resilience and firm performance.

The multiple regression analysis results showed that the all independent variables have positive effects on organizational performance. All variables studies have positive effects are significant to organizational performance is fairly significant given the p values of .076 and .061 respectively. The R² value of 0.418 shows that 41% of variance in firm performance is accounted for by the joint predictive power of project supervision, risk management, resource allocation and external collaboration. The ANOVA table ($F=(4,162)35.923$, $P < 0.01$) implied that the overall regression model is significant allowing us to predict organizational performance at a rate better than chance. The standardized coefficient revealed that project management is the most important predictor of organizational performance ($B=0.468$ $P < 0.01$), followed by risk management ($B=.364$, $P < 0.01$).

V. Conclusions

The study concludes that project management has significant effects on organizational performance, the study also concludes that all the sub-variables of project management examined in this study which includes supervisor management, risk management, resource allocation and external collaboration are necessary requirements for improved and sustainable organizational performance. Effective project management is required by all managers in order to increase performance in the organization.

Leading construction firms in these modern times are those with managers who have been able to dis-aggregate their organizations into series of projects whose performance is properly supervised before they are integrated into the system. Project portfolio management is the mainstay of successful leaders who cannot afford to drive whole organizations that are likely to go under.

VI. Recommendations

Based on the conclusion, the following recommendations were made

i. Firms should modify of resource allocation procedure was found to ensure successful implementation of strategic plans. Implementation of strategies in the organization was facilitated by state policies and regulations

ii. To conserve the construction projects after its completion, the quality of materials used in construction projects must not be compromised.

iii. More emphasis should be put on communication and risk management by developing plans for effective communication and risk handling when carrying out projects.

iii. More organization performance metrics recently developed in other research works like benefit to end users, benefit to national infrastructure should be included for performance Measurement.

REFERENCES

- [1]. Armstrong, M., & Baron, A. (2013). Performance Management: The New Realities. Chartered Institute of Personnel and Development.
- [2]. Belassi, W. and Tukel, O. (2016). A New Framework for Determining Critical Success/Failure Factors in Projects. International Journal of Project Management, 14 (3), 141-151.
- [3]. Carvalho, M.M., Rabechini Jr., R., (2017). Fundamentos em Gestão de Projetos: Construindo competências para gerenciar projetos: teoria e casos. third ed. Atlas, São Paulo (422p.).
- [4]. Cleland, D. I., & Ireland, L. R. (2017). Organization Management: Strategic Design and Implementation. (5th, Ed.) Singapore: McGraw-Hill.
- [5]. Grindley, P.C.; Teece, D.J. (2019) Managing intellectual capital: Licensing and cross-licensing in semiconductors and electronics. *Calif. Manag. Rev.*, 39, 8–41. [CrossRef]
- [6]. Guijt, I., Randwijk, W. & Woodhill, J. (2012). *A guide for project M&E: Managing for impact in rural development. International Fund for Agriculture Development (IFAD), Office of Evaluation and Studies (OE)*
- [7]. Hoang, H.A.; Rothaermel, F.T. (2010) Leveraging internal and external experience: Exploration, exploitation, and R&D project performance. *Strateg. Manag. J.*, 31, 734–758.
- [8]. Huang, C-M., & Yu, J. (2011). The effect of competitive and non-competitive R&D collaboration on firm innovation. *Journal of Technology Transfer*, 36, 383–403.
- [9]. Kohli, U. T., & Chitkara, K. K. (2018). Kohli, U. Organization management Handbook. New Delhi, India: Tata McGraw-Hill Publishing company Limited.
- [10]. Meredith, J. R.; Mantel, S. J. (2019) *Project management: a managerial approach*. New York: John Wiley & Sons, 2000.
- [11]. Nyonje, R. O., Ndunge, K. D., & Mulwa, A. S. (2012). Monitoring and Evaluation of Organizations and Programs - A Handbook for Students and Practitioners. Nairobi, Kenya: Aura Publishers.
- [12]. Olive, B. (2002). Planning for Monitoring and Evaluations. Olive Publication.
- [13]. Parida, V.; Westerberg, M.; Frishammar, J. (2010) Inbound open innovation activities in high-tech Firms: The impact on innovation performance. *J. Small Bus. Manag.* 2012, 50, 283–309. [CrossRef]
- [14]. Parida, V.; Westerberg, M.; Frishammar, J. (2012) Inbound open innovation activities in high-tech SMEs: The impact on innovation performance. *J. Small Bus. Manag.*, 50, 283–309. [CrossRef]
- [15]. Priscillah W.G., Robert A., & Mary K. (2020), carried an investigation on the influence of Organizational Resource Allocation and Strategy Communication on

Organizational Performance of Selected Supermarkets in Nairobi County. *International Journal of Research and Innovation in Social Science* IV(VIII), 331-340.

- [16]. Un, C.A., & Asakawa, K. (2015). Types of R&D collaborations and process innovation: The benefit of collaborating upstream in the knowledge chain. *Journal of Product Innovation Management*, 32, 138-153.