
Veronica Nkechi Imakwu and Kenneth Ituma Imakwu

1Department of Architecture/Building/Quantity Surveying, Ebonyi State University, Abakaliki, Nigeria, GSM.
2President/CEO, First Atlantis Consulting, Abakaliki, Ebonyi State, Nigeria.
Email:kenneth_imakwu@yahoo.com; Email:veronicaimakwu@gmail.com

ABSTRACT

“Factors Responsible for Effective Public Contracts Management and Projects Delivery-A Case Study of Ebonyi State, Nigeria, 2015-2020,” assessed how Ebonyi State Government successfully managed and delivered 100 road projects in the period under review. It has two research objectives and two questions and one null hypothesis. Survey research method was used. Population and sample size were 143 construction professionals in government and construction firms in Ebonyi State. Data were collected with the aid of structured questionnaire containing 12 items in two sections. Analyses of research questions were done with mean and standard deviation while the null hypothesis was tested using Chi-square statistic. Result of analysis was that contract planning and preparation were responsible for effective public contracts management and project delivery by Ebonyi State Government from 2015 to 2020 ($\chi^2=28.92$ at P<0.05.) It was concluded that contract planning and preparation and contract management system helped Ebonyi State Government to deliver 100 road projects from 2015 to 2020. The study recommended that the state should continue to use them and that other states in Nigeria should adopt and use them.

Keywords: Effective, Public Contracts, Contract Management, Projects Delivery.

INTRODUCTION

Governments all over the world use contracts to create social infrastructures for sustainable development through the conception and execution of viable public projects [1,2]. Thus, contracts are the building blocks used by governments to create productive assets that enable other sectors of the national economy to grow [3]. Poor public contract management and delivery leading to contract failures are global phenomena in developing and developed nations [4,5]. Abandonment and non-execution of public contracts such as construction of roads, housing projects, power supply stations, steel mills, hospitals abound in Nigeria at states and federal levels [6,7]. A contract is a written or oral binding agreement between parties identified in the agreement to fulfill certain conditions and terms outlined therein [8]. When a contract has been signed and executed and it could be called a project [9]. The project must be properly managed to ensure successful execution and delivery. There are three types of projects-public sector projects, private sector projects and joint venture projects [10]. Public sector projects are projects owned by the state (local government, municipal, provincial, state, federal or central government). Public projects include construction of roads, markets, public buildings, dams, electricity or power plants and water schemes. This study focused on public projects especially on road projects executed by Ebonyi State Government in Nigeria from 29th May, 2015 to 29th May, 2020 [11].

Ebonyi State was created on 1st October, 1996 from the present Enugu and Abia States by the Federal Military Government of Nigeria to give the people a sense of belonging, self-identity and to become the architects of their destinies and socio-
economic development. Aside roads, the first executive governor of the state from 29th May, 1999 to 28th May, 2007 focused more on manpower development, socio-economic and financial empowerment of all sections of the state [12]. The second executive governor from 29th May, 2007 to 28th May, 2015 focused on building bridges across Ebonyi Rivers in different parts of the state to ensure that every part of the state could be reached by vehicles. He also built a new state secretariat, embarked on gigantic water and market development, power plant, building of modern rice mills, rehabilitation of state and missionary hospitals to bring affordable health care to the people of the state aside roads [13]. The third and present executive governor of the state from 29th May 2015 to date, His Excellency, Engr. Chief Dr. David Nweze Umahi (FNSE,FNATE), made road infrastructure his number one project priority. He developed roads evenly all over the state and has put Ebonyi State on national and global map of states with first class roads infrastructure. He has also brought an unprecedented dynamism to public project management and delivery in the state in particular and among Nigeria in general by personally going out to inspect all road projects weekly rather than sit in his office to receive monitoring reports from government project supervisors. Ebonyi State Government under the present administration, has conceived, planned, managed and delivered over 100 road projects that cost N100billion (US$200million) between 29th May, 2015 and 29th May, 2020 aside other projects. The number of road projects completed and delivered successfully during the period under review was 104 out of 104 road projects and the state under the governor has embarked on another 200 road projects throughout the entire state through direct labour [14]. The study would be of immense benefits to public projects executors (local, municipal, provincial, states and the federal governments), private and joint projects’ executors within and outside Nigeria, to learn strategies for effective public contract management and delivery of their projects. This was the justification for the study on “Factors Responsible for Effective Public Contracts Management and Project Delivery in Ebonyi State, 2015-2020.”

Statement of the Problem

Serious concern has been expressed by the members of the public about Ebonyi State Government’s contracts that have failed from 1999 to 2014 such as Ebonyi World Trade Center at Presco Junction, Abakaliki and Ebonyi International Hotel at Ugwuachara; Oferekpe and Ukawu Water Schemes and Ebonyi Power Projects at Centenary City. All the failed or abandoned contracts gulped billions of naira. Failed contracts rob citizens of social amenities that should have been used in producing and providing goods and social services. They retard socio-economic development and without successful contract management, execution and delivery, development plans by Ebonyi State Government will be a mirage and no more than wishful thinking. Consequently, if the problems of poor public contract management and projects delivery in Ebonyi State is not tackled or solved, the state will continue to lag behind other states in Nigeria in the area of socio-economic development. Secondly, poor management of road contract projects will continue to hamper the movement of goods and services within the state, between the state and other states in south-east zone and other zones of the country. The state will be uncompetitive and may not be attractive to investors due to dearth of good road networks. It means that unemployment and underemployment of the youths of the state will continue to grow until it will reach crisis stage that will precipitate social unrest. Poor road contract implementation will lead to cost overruns or variations in contract sums which inevitably leads to higher contract costs for the state that is fourth among states with the least federal allocation in Nigeria. It is, therefore, against this background that the study examined “Factors Responsible for Effective Public
Objectives of the Study

The main objective of the study is to determine the factors responsible for the effective public contracts management and project delivery in Ebonyi State, Nigeria from 2015 to 2020. The specific objectives are to:

i. Determine contract planning and preparation activities responsible for effective public contracts management and project delivery in Ebonyi State, Nigeria from 2015-2020.

Research Questions

The research questions that guided the study were:

1. What are the contract planning and preparation activities responsible for effective public contracts management and project delivery in Ebonyi State, Nigeria from 2015-2020?

2. What are the contract management system activities responsible for the effective public contracts management and project delivery in Ebonyi State, Nigeria from 2015 to 2020?

Statement of Hypotheses

The null hypothesis that guided the study is:

H₀: Contract planning and preparation activities are not responsible for effective public contracts management and project delivery in Ebonyi State, Nigeria from 2015-2020.

LITERATURE REVIEW

Conceptual Review

Meaning of Contract

A contract is a written or orally binding agreement between parties identified in the agreement to fulfill certain terms and conditions outlined in the agreement. It is a legal agreement that is enforceable in law. A prerequisite requirement for the enforcement of a contract among other things is the condition that the parties to the contract accept the terms of the claimed contract [15]. A valid contract must be signed, executed and delivered. An executed contract is a legal document that has been signed off by the authorized representatives of the parties to make it effective. Execution involves the appending and witnessing of signatures of the right signatories to the contract document. After a contract has been signed and executed, no changes can be made to the contract language. A contract for the execution of a project can be called a project contract. A public contract is one between the government, its agencies and a contractor/vendor for the execution of a public project such as road, bridge, airport, canal, water and power plant construction to mention but a few. In Nigeria, most of the public projects like road construction, building of airports, seaports, housing estates, higher institutions, office blocks, power and water projects, parks, markets, hospitals and industries owned by the State Governments and the Federal Government are usually executed through contracts. The contractor is the person, a firm or a company that undertakes the contract. A contract is valid in law if it meets the essential elements of a valid contract [16]: namely: there must be an offer and acceptance; there must be an intention to create a legal relationship between the parties to the contract; the consent of the parties to the contract shall be free and genuine; the parties to the contract must have legal capacity to contract; they must not be minors or lunatics; there must be lawful
consideration between the parties to the contract; the object of the contract must be lawful and not the one the law disapproves or illegal; the contract must not have been declared as void by any law in force in the country; the meaning of the contract must be certain without any room for ambiguity or different interpretations; the terms of the contract must be capable of performance; and the contract must fulfill the necessary legal formalities, that is, it must be in writing or oral.

Contract Management

Contract management in a road project covers scope, quality, time, cost, risk, resources, change and communication [18]. It is the duty of the project manager to manage these issues. Effective contract management, whether public or private sector contract, involves the presence of the following elements [19] clearly defined project objectives or goals; project plans/schedules; competent project manager; top management or EXCO support; competent project team members; sufficient resource allocation; adequate communication channels; control mechanisms; monitoring and feedback capabilities; responsiveness to client; client consultation; technical tasks; trouble shooting; clear responsibility and accountability of team members; and client acceptence.

Project

A project is a one-time activity that produces a specific outcome; an example is a road. It is synonymous with a signed and executed contract that is being implemented. The contract becomes a project at the stage of ongoing implementation. Project has been defined by [20] as an organized programme of pre-determined group of activities that are non-routine in nature and that must be completed using the available resources within the given time limit. The Project Management Institute defines a project as a system involving coordination of a number of separate department entities throughout the organization and which must be completed within prescribed schedules and time constraints [21]. A project has a defined beginning and end with specified time for completion; a specific preordained goal or set of goals; a series of complex or interrelated activities and a limited budget [22]. A project can be the construction of a building, a road, a dam, hospital, an airport, school, church or electricity generating plant to mention a few. Problems of project completion have been examined by many experts and they have identified some of the causative factors. [23], found that ineffective project planning and preparation, faulty appraisal and selection processes; defective project design, problems in start-up and activations were some of the causes of projects delays and non-completion.

Theoretical Background

This study was guided by the theory of complete contract. The Theory of Complete Contract was propounded by Oliver Williamson in 1975 [24]. The theory states that contracts are always obligationally complete. This is because in order for the court to enforce the contract, it must conclude that the
Planning and preparation are essential to contract or project success. Some of the researches carried out on the issue of planning and preparation that affect contract management and project delivery in many countries including Nigeria are reviewed here. [25] carried out a study on “The Effects of Risk Management at Project Planning Phase on Performance of Construction Projects in Rwanda.” The study targeted architects, engineers, project managers, quantity surveyors, contractors and regulatory authorities in operation in Rwanda and key clients with major investments in the construction industry. The study used both qualitative and quantitative methods of data collection. Data were processed using SPSS and Correlation Analysis. The research result indicated that risk management practices at planning stage had an effect on project performance.

[26], conducted a study on “Project Time Planning in Norwegian Construction Industry.” A survey design using questionnaire was conducted in partnership with Speed Up project using a sample size of 141. Sixty two (62) respondents or 44% was the response rate. The study concluded that poor time project planning had a harsher effect on delay in project execution phase and that the best phases to improve the project schedule was in the planning phase of the projects. [7], conducted a study on “Planning in Construction: Longitudinal Study of Pre-Contract Planning Model Demonstrates Reduction in Project Cost and Schedule Growth,” in the United States of America. The aim of the study was to demonstrate that a brief yet rigorous project planning method, known as pre-contract planning model, will increase project team alignment and facilitate greater risk transfer from the owner to the contractor. Results from a multi-case longitudinal study showed that pre-contract planning model may be a viable planning mechanism to be implemented in the construction industry.

[9] conducted a study in Egypt on “Challenges of Mega Construction Projects (MCP) in Developing Countries,” to identify, validate and classify the challenges of delivering mega construction projects in developing countries. The method of study was literature review and case studies. The study collected data on available mega construction projects worldwide which was 348 projects, excluding non-construction projects such as information technology, military, science, oil and gas. The 36 mega construction projects (MCPs) in developing countries were grouped as follows: dams, canals, hydroelectric and water infrastructure projects – 8; planned
cities, stadia and urban renewal projects - 7; bridges and highway projects - 7; rail and rapid transit projects - 5 and airport projects - 9. The study found 45 challenges of developing mega construction projects in developing countries and that poor project planning or lack of strategic project planning knowledge caused problems in project implementation and completion in developing countries. [11], carried out a study titled “Evaluating Levels of Project Planning and their Effects on Performance in the Nigerian Construction Industry,” aimed at creating awareness of the levels and effectiveness of the planning done by construction professionals.

METHODS
The study used survey design. The area of study was Ebonyi State, in Southeast Region in Nigeria. The population of study was 143 building professionals made up of architects, builders, civil engineers and quantity surveyors working as civil servants and in construction firms in Ebonyi State. There was no sample size as the whole population was used. The instrument for data collection was a questionnaire structured on a five point Likert Type scale of Strongly Agree (SA), Agree (A), Undecided (UD), Strongly Disagree (SD) and Disagree (D). They were assigned weights of 5,4,3,2 and 1 respectively. It had two sections with 6 questions each. The research questions were analysed using mean and standard deviation while the null hypothesis was tested using Chi-square statistic. 143 copies of the questionnaires were distributed to the respondents but only 140 copies were returned and used for analysis.

RESULTS
Contract planning and preparation activities responsible for effective public contracts management and project delivery by Ebonyi State Government of Nigeria, 2015-2020
Table 1 showed that there were six contract planning activities responsible for public contract management and project delivery by Ebonyi State Government in Nigeria from 2015-2020. These included the following: Ability of Ebonyi State Government to commit enough resources for feasibility studies; Appropriate project identification and preparation procedures within the state’s ministry of works and transport; Adequate analysis of the absorptive capacity of the state governments’ revenue to finance and execute specific projects by the State Ministry of Works and Transport simultaneously; Ebonyi State Governor initiates projects only after proper planning and preparation; Ebonyi State Governor awards contracts only after proper planning and preparation for the project and Ebonyi State Government starts road projects in a year only when there is capital outlay to fund them. The mean ratings for construction professionals in government and those working in construction firms ranged from 3.92 to 4.47 with their standard deviation scores ranging from 0.26 to 0.32. Their grand mean score was 4.35 and greater than 3.50. Each item mean rating was also greater than 3.50, thus, meeting the criterion that civil servants and contractors agreed. Standard deviation value for each project planning activity was less than 0.5. The standard deviation values clustered around each mean value tightly, showing homogeneity in agreement. Construction professionals in government and contracting firms agreed that the above listed six planning activities were responsible for public contract management and project delivery by Ebonyi State Government of Nigeria.
Table 1: Contract planning and preparation activities responsible for effective public contracts management and project delivery by Ebonyi State Government from 2015-2020

<table>
<thead>
<tr>
<th>S/N</th>
<th>Planning Activities</th>
<th>Construction Professionals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>1</td>
<td>Ability of Ebonyi State Government to commit enough resources for feasibility studies</td>
<td>4.47</td>
</tr>
<tr>
<td>2</td>
<td>Appropriate project identification and preparation procedures within Ebonyi State Ministry of Works and Transport</td>
<td>4.37</td>
</tr>
<tr>
<td>3</td>
<td>Adequate analysis of the absorptive capacity of Ebonyi State Government revenue to finance and execute specific road projects by the State Ministry of Works and Transport at the same time</td>
<td>4.34</td>
</tr>
<tr>
<td>4</td>
<td>Ebonyi State Governor initiates projects only after proper planning and preparation</td>
<td>3.92</td>
</tr>
<tr>
<td>5</td>
<td>Ebonyi State Governor awards road contracts only after proper planning and preparation for the project</td>
<td>4.29</td>
</tr>
<tr>
<td>6</td>
<td>Ebonyi State Government starts many road projects in a year only when there is capital outlay to fund them</td>
<td>4.09</td>
</tr>
<tr>
<td></td>
<td><strong>Grand Total</strong></td>
<td><strong>25.48</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Grand Mean</strong></td>
<td><strong>4.35</strong></td>
</tr>
</tbody>
</table>

Source: Field Survey, 2022

Contract management system activities responsible for public contract management and project delivery by Ebonyi State Government, 2015-2020

Table 2 shows that there were six contract management activities responsible for public contract management and project delivery by Ebonyi State Government in Nigeria from 2015-2020. These included the following: competent team members; EXCO Support; sufficient resource allocation; monitoring feedback capabilities; technical tasks; and adequate communication channels. The mean ratings for construction professionals in government and those working in construction firms ranged from 3.82 to 4.07 with their standard deviation scores ranging from 0.21 to 0.23. Their grand mean score was 3.91 and greater than 3.50. Each item mean rating was also greater than 3.50, thus, meeting the criterion that construction professionals in government and contracting firms agreed. Standard deviation value for each project management activity was less than 0.5. The standard deviation values clustered around each mean value tightly, showing homogeneity in agreement. Construction professionals agreed that the above listed six contract management activities are responsible for public contract management and project delivery by Ebonyi State Government of Nigeria from 2015 to 2020. In conclusion, this result answered the second research question in the affirmative that there were six contract management activities responsible for public contract management and project delivery by Ebonyi State Government of Nigeria from 2015 to 2020.
Table 2: Contract management system activities responsible for public contract management and project delivery by Ebonyi State Government of Nigeria from 2015-2020

<table>
<thead>
<tr>
<th>S/N</th>
<th>Effective Contract Management System Activities</th>
<th>X</th>
<th>SD</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Competent team members</td>
<td>3.84</td>
<td>0.21</td>
<td>Agreed</td>
</tr>
<tr>
<td>2</td>
<td>EXCO Support</td>
<td>4.09</td>
<td>0.23</td>
<td>Agreed</td>
</tr>
<tr>
<td>3</td>
<td>Sufficient resource allocation</td>
<td>4.00</td>
<td>0.22</td>
<td>Agreed</td>
</tr>
<tr>
<td>4</td>
<td>Monitoring feedback capabilities</td>
<td>3.87</td>
<td>0.21</td>
<td>Agreed</td>
</tr>
<tr>
<td>5</td>
<td>Technical tasks</td>
<td>3.83</td>
<td>0.21</td>
<td>Agreed</td>
</tr>
<tr>
<td>6</td>
<td>Adequate communication channels</td>
<td>3.82</td>
<td>0.21</td>
<td>Agreed</td>
</tr>
<tr>
<td></td>
<td><strong>Grand Total</strong></td>
<td><strong>23.45</strong></td>
<td><strong>1.29</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Grand Mean</strong></td>
<td><strong>3.91</strong></td>
<td><strong>0.22</strong></td>
<td>Agreed</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2022

Test of Hypothesis 1

H0: Contract planning and preparation activities were not responsible for public contract management and project delivery in Ebonyi State, Nigeria from 2015-2020

Table 3: Observed and Expected Frequency for Testing Hypothesis 1

<table>
<thead>
<tr>
<th>Responses</th>
<th>Observed Frequency (O)</th>
<th>Expected Frequency (E)</th>
<th>O-E</th>
<th>(O-E)^2</th>
<th>Σ (O – E)^2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreed</td>
<td>115</td>
<td>70</td>
<td>45</td>
<td>2025</td>
<td>14.46</td>
</tr>
<tr>
<td>Disagreed</td>
<td>25</td>
<td>70</td>
<td>-45</td>
<td>2025</td>
<td>14.46</td>
</tr>
<tr>
<td>Total</td>
<td>140</td>
<td>140</td>
<td></td>
<td>N</td>
<td>28.92</td>
</tr>
</tbody>
</table>

Source: Researcher’s Compilation, 2022

Decision: Since Chi-square calculated value of 28.92 was greater than Chi-square table value of 11.070, we could not accept H0 (null hypothesis). H0 was rejected and Hi (alternative hypothesis) was accepted.

Conclusion: It was concluded, at 5% level of confidence and with 5 degrees of freedom, that “Contract planning and preparation activities were responsible for public contact management and project delivery by Ebonyi State Government from 2015 to 2020.” The result of the test was statistically significant. In other words, contract planning and preparation were responsible for public contract management and project delivery by Ebonyi State Government from 2015 to 2020.

Discussion of Findings

Planning and preparation activities were responsible for public contract management and project delivery in Ebonyi State, Nigeria, 2015-2020

Test of Hypothesis found that “Planning and preparation activities were responsible for public contract management and project delivery in Ebonyi State from 2015 to 2020”. This was the same finding in the analysis of research question where construction professionals in government and contracting firms agreed that planning and preparation activities were responsible for public contract management and project delivery in Ebonyi State as follows: ability of Ebonyi State Government to commit enough resources for feasibility studies; appropriate project identification and preparation procedures within the state’s
ministry of works and transport; adequate analysis of the absorptive capacity of the state governments' revenue to finance and execute specific projects by the State Ministry of Works and Transport simultaneously; Ebonyi State Governor initiates projects only after proper planning and preparation; Ebonyi State Governor awards contracts only after proper planning and preparation for the project and Ebonyi State Government starts road projects in a year only when there is capital outlay to fund them. The implication of the finding was that project planning and preparation was one of the causes of contract/project success. A contract or project is adjudged to be a success or must have been successfully implemented, no matter the implementation challenges met, if it meets four criteria, namely: time criterion, monetary criterion, effectiveness criterion and client satisfaction criterion [5,8,10,12,15]. In other words, a contract is successful if it is: completed on schedule thereby meeting time criterion; completed within approved budget, thereby meeting its monetary criterion; achieves basically all goals originally set for it, thereby meeting its effectiveness criterion; and it is accepted and used by the clients for whom the project is intended, thereby meeting its client satisfaction criterion. All the road projects conceived, planned, awarded, executed, managed and delivered by Ebonyi State Government between 29th May, 2015 and 29th May, 2020 met all the internationally accepted criteria for successful contract execution and project delivery. The above result is consistent with the finding of the study by [7], in Nigeria that project planning and engagement of project officers enhanced project performance. [19] found in their study, that there was synergy between project planning and project successes in South Korea. It is also consistent with the findings of [10], in Rwanda, that risk management practices at planning stage had an effect on project performance. The finding of the study is also supported by the findings of study by [12], in Germany that project planning enhances project success and that failure to plan leads to projects’ failures. Finally, study by [11], in Egypt using case studies, found that lack of project planning caused problems in project implementation and completion in developing countries.

CONCLUSION

The findings of the study based on the objectives were: contract planning and preparation and contract management system were responsible for public contract management and project delivery by Ebonyi State Government from 2015 to 2020. The conclusion was that Ebonyi State Government delivered the road projects because it used contract planning and preparation; and contract management system. Based on the findings and conclusion of the study, it was recommended that Ebonyi State Government should continue to ensure that proper planning and preparation are done for all their projects before the signing of contracts with contractors and that other states in Nigeria should adopt the same method. They can do this by engaging external consultants to carry out feasibility studies to assess the viability and socio-economic benefits of the projects; projects must have state EXCO support and approval; they must commit enough funds for the execution of the projects through adequate budgetary provisions; contracts should not be awarded unless they have been properly planned for and many projects should not be started in a year without adequate capital outlay to fund them.

REFERENCES


3. Akash, S. (2016). Avoiding project failure by using project management methodologies, Published MBA Dissertation Report, Department of Business Administration, Dublin Business School, University of Dublin, Republic of Ireland.


