

Factors Influencing Cost of Construction Project Delivery in Rivers State, Nigeria¹

Godson Kelechi and Nwogu Prince Chinemerem

Abstract

The study examined factors influencing cost of construction project delivery in Rivers State, Nigeria. Construction is an important part of the economy and plays a role as indicator to socio-economic advancement when it comes to Nigerian context; thus development. Nonetheless, fixed cost delivery of construction projects is still very high in the Nigeria construction industry with both Public and Private Sector leading by example. The study attempts to pinpoint what these factors are, quantify their effect as a cost driver and suggest ways to mitigate the costs. In a similar vein, the literature review of different authors on this topic was presented at the outset. A descriptive research survey design was employed for this study; therefore, one hundred and fifty seven (157) questionnaires were distributed scope wise among professionals in public or private construction sectors: sixty (60) to consultants, eighty (80) to contractors, and seventeen (70) to clients. One hundred thirteen (113) usable responses were collected. The research draws data from primary and secondary sources using a standard questionnaire based on five-point Likert scale which was administered to all professionals in construction industry operating in Rivers State. Statistical tools such as SPSS version 25.0 and Microsoft Excel was used to help in data analysis using different methods, including Relative Importance Index (RII) and Mean Item Score (MIS). This implies that the most critical factors contributing to increased cost of construction project delivery in Rivers State Nigeria are lack of data on construction costs followed by bad practices (methods) and improper pricing. Construction project cost is a mission-critical issue; the study advocate that to minimize construction project costs, then quantity surveyors/ purchaser or cost economist should manage these determining characteristics of building projects for uninterrupted progress in addition with estimate including contingencies within an overall likely range and also ready to put measures together on how best way they can address them whenever anyone appears at adverse against specific forecasted end result for any particular given price. Based on the findings, it was therefore recommended that the consultants, contractors and clients without any further delay should apply these strategies for cost reduction in construction project delivery such as optimizing Project Planning effective resource management technology adoption, community engagement, government policies and regulations etc. which will enhance transparency integrity accountability on one hand in corner with value added treatment of public fund at all level. Paying attention to stabilizing the economy by minimizing inflation and currency fluctuations impacting construction costs is paramount for government actions. This would help reduce reliance on imports and overall save cost of materials domestically by supporting local manufacturing. There is need to incentivize the industries that create jobs domestically. Efficient project management practices such as good planning, scheduling and resource management can help mitigate inefficiencies so that costs do not begin to eddy.

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1. Introduction

A successful delivery of construction projects will help to enhance project efficiency and effectiveness and also enable various construction professionals to meet up construction project deadlines (Kelechi, Amadi, & Chinemerem, 2025). With respect to construction project delivery, cost entails the primary criterion evaluated when determining the success of the delivery of construction projects (Olukyode et al., 2015). This is because cost acts as the fundamental and driving force throughout the construction phase of a project. The construction sector in Nigeria, particularly in Rivers State, plays a critical role in infrastructural development and economic growth. However, this industry consistently faces numerous problem related to project budget overrun and delivery inefficiencies. Rivers State as a case study, known for its oil-rich economy and complex geographic conditions, presents unique issues to the delivery of construction project, such as difficult terrain, high groundwater levels, and frequent flooding (Ujene & Adewuyi, 2024). The main Key factors influencing construction project costs in Rivers State include inadequate planning, fluctuations in material prices, poor cost estimation, delays in payment to contractors, and political instability (Okpo, Sylvester, & Offiong, 2023). In addendum, methods of procurement and with respect to vendor selection criteria have been shown to significantly impact both the cost and quality of construction project delivery (Odike, Enyinna, & Osuagwu, 2025a). however, various studies have also highlighted that insufficient adoption of cost optimization strategies contributes to higher delivery costs. Tools, for example life-cycle costing and also target costing are underutilized despite their proven benefits in other regions (Ujene & Adewuyi, 2024). Moreover, the prevalence of traditional procurement methods over electronic procurement methods has been linked to inefficiencies and cost escalation (Odike, Enyinna, & Osuagwu, 2025b).

Furthermore, macroeconomic variables such as inflation and foreign exchange volatility exacerbate the unpredictability of construction costs in Nigeria (Mahmud, Ogunlana, & Hong, 2021). Environmental factors, including land conditions and accessibility issues specific to Rivers State, also add complexity to budgeting and resource planning (Amadi, 2016). The compounded effect of these factors often results in project delays, disputes among stakeholders, and ultimately, budget overruns (Oluwajana et al., 2022). Understanding these diverse drivers is essential for developing effective cost control frameworks and ensuring successful project delivery in Rivers State. By comprehensively reviewing these factors, policymakers, contractors, and investors can make informed decisions to enhance project performance and reduce financial risks. Cost deviations from the initial plan are common on construction sites (Olukyode et al., 2015), attributed to inflation, rising material prices and labor wages, difficulties in obtaining materials, construction delays, inaccurate cost estimates, and unexpected subsoil conditions (Musarat et al., 2021). It is rare for construction projects to be completed within budget due to numerous factors influenced by the multidisciplinary nature of the industry, involving owners, professionals, contractors, and suppliers (Mac-Barango, 2018). Sa'id and Azmi (2022) highlighted that fraudulent practices and kickbacks by major industry players significantly impact construction costs in Nigeria, leading to issues such as arbitration, project abandonment,

contractors losing profits due to penalties, negative reputational impact, and difficulties in securing future jobs. Under normal circumstances, the total construction cost is expected to include materials, labor, site overheads, equipment/plant, head office costs, and profit.

This study aims to examine the factors influencing cost of construction project delivery in Rivers State, Nigeria and suggest strategies of reducing cost of construction project delivery in Rivers State, Nigeria. The specific objectives of this study are: to identify the primary factors influencing cost of construction project delivery in Rivers State, Nigeria, to assess the severity ranking of these factors among consultants, contractors, and clients and to suggest strategies for reducing construction costs in Rivers State Nigeria. The study focuses on projects within the Rivers State, Port Harcourt metropolis of Nigeria, chosen for its accessibility to information. The target respondents for this study were professionals in both public and private sector construction industries in Rivers State, Nigeria, namely: clients, consultants, and contractors.

2. Literature Review

2.1 The Construction Industry in Nigeria

The construction industry is an important driver of economic growth and infrastructural development of a country. In Nigeria as a case study, this industry provides essential role in meeting up the nation's economic, housing and infrastructure needs while enhancing employment opportunities to job and GDP growth (National Bureau of Statistics [NBS], 2023). In 2023, the construction industry contributed about 9% to Nigeria's GDP and employment millions of people across various skill levels (NBS, 2023). Rivers State as a case study, located in the oil-rich Niger Delta region, is one the important industrialized and economically essential states. With respect to the capital city, Port Harcourt, which is known as the "Oil Capital of Nigeria," Rivers State is a hub for production oil and gas activities, manufacturing, shipping, and trade (Federal Ministry of Works and Housing, 2023). As a result, its economic vibrancy had lead to an increasing demand for the delivery of construction projects, ranging from residential buildings and commercial buildings to roads, bridges, and oil-related infrastructure. However, as a result its fast development, the delivery of construction projects in Rivers State as a study, are constantly challenged by cost overruns, delays, and quality issues. The rising cost of construction project delivery has become vital concern to various stakeholders, involving the government agencies, private developers, contractors, and local communities (Idoro, 2012; Ameh & Osegbo, 2011). It also enhance a significant role in infrastructural development and provides substantial sustainable employment opportunities (Guardian Nigeria, 2022). The delivery of construction project in Rivers State, Nigeria are driven by both public and private investors. The government involve in most of the important infrastructure projects, for example roads, bridges, dredged waterways and ports, and railways through various means, including full government funding, public-private partnerships (PPPs), multilateral development banks (MDBs), and bilateral creditors.

2.2 The functions of professionals with respect to Construction Cost management

2.2.1 The Consultants

The main functions of consultants with respect to construction cost management include project managers, quantity surveyors, and architects, aid in enhancing requisite expertise in terms of the design, planning, and execution phases of the delivery of construction project. Their major focus is on maintaining cost control, timely delivery, and also quality assurance. Consultants as a professional in construction project is tasked with the responsibilities of preparing cost estimates that align with the current market conditions and realistic scope of the project. Omole (2012) categorically emphasizes that accurate analysis of cost and control are vital services rendered by the consultants throughout execution of the project.

2.2.2 The Contractors

The contractors, as far as construction project delivery is concerned, are the primary executors of the construction process. They enhance for the physical actualization of the project by managing labor in during construction, materials, and construction schedules. In addition, one of the major problem contractors face in Rivers State, Nigeria is the price fluctuation of materials. Another are factors such as currency devaluation, inflation, and supply chain disruptions which in turn contribute to the rising cost of construction of building materials. In order enhance a successful construction project delivery, the main contractors core function is with respect to for mobilizing and managing labour, equipment, and materials is to effectively and efficiently complete projects in terms of time, quality, and cost efficiency (Omole, 2012).

2.2.3 The Clients

For a successful delivery of construction project, the clients are the main owners, investors, or developers of construction projects who makes sure the construction projects are actualized within the set budget, time and ensure quality standards. In Rivers State as a case study, clients' experiences reveal various factors influencing the cost of construction projects. Furthermore, Clients usually face numerous challenges such as cost overruns or budget overrun, when there is insufficient financial planning. As construction projects is in progress, inflation and material cost fluctuations may result to unanticipated expenses. According to Omole (2012), the client's significant contribution to the industry's success which lies in efficiently and effectively defining project requirements before the commencement of the design. In addendum, setting out a vital realistic cost limits during project briefings and enhancing adequate financial provisions before the project initiation are also crucial duties of the clients to ensure the delivery of construction project.

2.3 Cost of Construction Factors

There are factors that influence construction costs for large buildings with respect to Rivers State, Nigeria and other developing countries. In a study by Omoregie and Radford (2006) pinpointed 15 main factors which contributes to project inefficiencies, delays and cost escalation in the Nigerian construction sector which include material price fluctuation — especially the one driven by exchange rate volatility and inflation which were identified to be the most severe. The material price fluctuation as a matter of fact greatly affect greatly the costs of construction materials and its consequences is to increase the overall cost of the project (Omoregie & Radford, 2006). Nevertheless, Elinwa and Silas (1992) had earlier found out 31 factors influencing high building costs especially in Nigeria, were fraudulent practices and kickbacks are major challenges. It is important to note that such unethical practices by various professionals most times result in inflated project costs and compromised project quality. A more recent study by Eshofonie and Oboirien (2022) identified poor project planning, fluctuating material costs, inadequate funding, inflation, and insecurity are among one of the major factors influencing

construction costs in Rivers State, Nigeria. In addendum, the COVID-19 pandemic and subsequent global supply chain disruptions have consistently worsened this cost factors thereby increasing delays and pushing up prices of materials which are mostly imported (Ameh & Odusami, 2021).

2.4 Factors influencing cost of construction project delivery in Rivers State, Nigeria

Globally, there are various factors influencing cost of construction project delivery, which if not identified and provide measures to mitigate these factors, it will go a long way to hinder the success of a construction project. For instance, poor management-labour relations can ultimately result to low morale, compromise productivity, and ultimately lead to increase in project costs. A collaborative team approach enhances efficiency and aid control costs (Olanrewaju & Abdul-Aziz, 2021). Higher weather conditions — especially with respect to heat and humidity — in turn reduce worker efficiency and disrupt construction schedules. Recently climate variability has seriously increased these risks.

Table 2.1 Factors influencing cost of construction project delivery in Rivers State, Nigeria

S/N	Factors	Sources
1	Relationship Between Management and Labour	Olanrewaju & Abdul-Aziz, 2021).
2	Effects of Weather	Oke & Aigbavboa, 2022
3	Inadequate Local Production of Raw Materials	Ameh & Odusami, 2021; Olanrewaju & Abdul-Aziz, 2021
4	Reliance on Imported Components for Electricity Production	Eshofonie & Oboirien, 2022
5	Supplier Manipulation	Adebayo et al., 2023
6	Government Policies	Oladokun, 2022
7	Contractor Cartels	Okorie et al., 2020
8	Incorrect Planning	Eshofonie & Oboirien, 2022
9	Fraudulent Practices and Kickbacks	Okorie et al., 2020
10	Political Interference	Adebayo et al., 2023
11	Contract Management	Olanrewaju & Abdul-Aziz, 2021
12	Lack of Coordination Between Designers and Contractors	Ameh & Odusami, 2021
13	Cost of Materials	Oladokun, 2022
14	Additional Work	Adebayo et al., 2023
15	Poor Financial Control on Site	Eshofonie & Oboirien, 2022
16	Disputes on Site	Oke & Aigbavboa, 2022
16	Fluctuation of Material Prices	Oladokun, 2022
17	Contract Procedures	Ameh & Odusami, 2021
18	Incorrect Estimation Methods	Adebayo et al., 2023
19	Waste Management on Site	Oke & Aigbavboa, 2022
20	Transportation Costs	Adebayo et al., 2023
21	Contract Duration	Olanrewaju & Abdul-Aziz, 2021
22	Equipment Costs	Eshofonie & Oboirien, 2022
23	Mode of Financing, Bonds, and Payment	Okorie et al., 2020

Author's compilation, 2025.

2.5 Strategies for reducing Cost of construction project delivery in Rivers State, Nigeria

For a successful delivering of construction projects in Rivers State, Nigeria, effective and efficient project planning aid in minimizing delays and optimizes resource allocation, which result to efficient use of time and materials to achieve the project goal (Olanrewaju & Abdul-Aziz, 2021; Eshofonie & Oboirien, 2022). Using Value engineering which involves a systematic analysis of project functions mitigate or modify elements that increases costs of construction projects without improving their core value. This entails evaluating all design alternatives, construction methods, and also material selections to achieve value for money without reducing quality. It is essential to know that Prioritizing majorly the use of locally available building materials aids reduce cost of transportation and dependency on imports, contributing to efficient cost savings.

Table 2.2 Strategies for reducing Cost of construction project delivery in Rivers State, Nigeria

S/N	Strategies	Sources
1	Optimizing Project Planning	Olanrewaju & Abdul-Aziz, 2021; Eshofonie & Oboirien, 2022
2	Value Engineering	Adebayo et al., 2023
3	Material Selection	Adebayo et al., 2023
4	Efficient Resource Management	Oke & Aigbavboa, 2022
5	Effective Supplier Management	Babatunde & Perera, 2019
6	Energy Efficiency	Oladokun, 2022
7	Standardization and Modular Construction	Afolabi, Emeghe, & Oyeyipo, 2018; Adebayo et al., 2023
8	Contractor Selection and Management	Olanrewaju & Abdul-Aziz, 2021
9	Risk Management	Odeyinka et al., 2019
10	Lean Construction Practices	Afolabi, Ojelabi, & Omuh, 2017
11	Maintenance Planning	Babatunde & Perera, 2019
12	Community Engagement	Oyedele, Ajayi, & Kadiri, 2020
13	Technology Adoption	Aibinu & Venkatesh, 2014; Oke & Aigbavboa, 2022
14	Government Policies and Regulations	Oladokun, 2022
15	Continuous Improvement	Olanrewaju & Abdul-Aziz, 2021

Source : Authors compilation, 2025.

3. Methods of the study

This study investigates factors influencing cost of construction project delivery in Rivers State, Nigeria and suggest strategies for cost reduction in delivering of construction project in Nigeria. The study employs a descriptive survey research design, focusing specifically on Rivers State, Nigeria. Despite Nigeria's capital moving to Abuja, Rivers state as a case study, remains crucial in the nation's economy, commerce, and governance. Rivers State features extensive

infrastructure, including roads, bridges, skyscrapers, residential complexes, government and private facilities, educational institutions, healthcare centers, theaters, cinemas, and shopping malls. A total of 157 questionnaires were distributed to professionals in the public and private sectors of the construction industry, including consultants, contractors, and clients. A judgmental and area sampling technique was used, targeting areas with high population density and a concentration of construction projects. One hundred and thirteen valid responses were received for further analysis. The study population consisted of clients, consultants, and contractors involved in construction project delivery in Rivers State. Primary and secondary data sources were utilized, and data collection employed a well-structured, standard questionnaire based on a five-point Likert scale to gather responses from professionals across Nigeria's construction industry sectors. Data analysis utilized statistical tools such as SPSS version 25.0 and Microsoft Excel, employing methods like Relative Importance Index (RII) and Mean Item Score to analyze the data.

4. Results and Discussion of Findings

Table 2.2 Questionnaire distribution and responses

Respondents	Distribution	Responses	(%)Responses
Consultants	60	43	72
Contractors	80	60	75
Clients	17	10	59
Total	157	113	72

Source: Field Data, 2025.

Based on the table above, 157 questionnaire were distributed to various respondents, only 113 were duly returned and found valid for the analysis.

Table 2.3 The summary of relative importance index(RII) of the primary factors influencing cost of construction project delivery in Rivers State, Nigeria.

S/N	Factors	Respondent's scorings					RII	RANK
		1	2	3	4	5		
1	Incorrect planning	20	20	20	20	33	0.646	15 th
2	Cost of materials	20	30	20	20	23	0.593	25 th
3	Wrong method of estimation	10	10	20	30	43	0.752	2 nd
4	Contract management	20	20	10	30	33	0.664	11 th
5	Fluctuation of prices of materials	10	25	25	30	23	0.655	13 th
6	Previous experience of contractors	30	30	20	20	13	0.522	38 th
7	Additional cost	10	25	30	20	28	0.655	13 th
8	Absence of construction cost data	5	13	14	40	41	0.703	3 rd
9	Project financing	10	20	20	30	33	0.699	5 th
10	High cost of transportation	0	15	25	40	33	0.761	1 st
11	Poor financial control on site	30	20	30	20	13	0.539	36 th
12	Economic stability	25	25	40	10	13	0.531	37 th
13	Fraudulent practices and kickbacks	30	25	25	13	20	0.543	35 th
14	Inadequate labour availability	15	45	30	20	3	0.513	39 th
15	High cost of machinery	10	40	10	20	33	0.646	15 th
16	Inadequate production of raw materials	25	25	25	25	13	0.557	33 rd

17	Contractual procedures	20	20	10	30	33	0.664	11 th
18	High cost of machinery maintenance	5	40	5	40	23	0.593	25 th
19	Bureaucracy in tendering method	20	20	35	30	8	0.575	28 th
20	Duration of contract period	30	20	20	20	23	0.575	28 th
21	Suppliers manipulation	23	20	30	10	30	0.607	22 nd
22	Disputes on site	10	30	20	30	23	0.646	15 th
23	High cost of labour	15	25	40	13	20	0.596	24 th
24	Government policies	30	15	35	20	13	0.548	34 th
25	Relationship between management and labour	30	25	35	10	13	0.513	39 th
26	Currency exchange	20	30	5	25	33	0.637	20 th
27	Frequent design changes	15	25	25	15	33	0.646	15 th
28	High interest rate changed by banks	10	35	10	40	18	0.566	31 st
29	Social and cultural impacts	23	20	30	10	30	0.607	22 nd
30	Lack of coordination between designers	20	15	35	20	23	0.619	21 st
31	Long period between design and tendering	15	23	30	30	25	0.701	4 th
32	Contractor's cartel	25	25	23	30	10	0.573	30 th
33	Mode of financing bond and payments	10	20	25	20	38	0.699	5 th
34	Political interferences	18	25	30	30	10	0.580	27 th
35	Number of competitors	20	15	25	25	28	0.646	15 th
36	Lack of productivity standard	20	30	30	15	18	0.566	31 st
37	Numbers of construction going on at the same time	10	23	25	25	30	0.674	10 th
38	Levels of competitors	5	30	25	25	30	0.685	8 th
39	Insurance cost	3	30	30	20	30	0.677	9 th
40	Labour nationality	8	20	25	30	30	0.695	7 th

Source: Field survey, 2025.

Table 2.2 above shows that high cost of transportation with mean relative importance index (0.761), wrong method of estimation (0.752), absence of construction cost data (0.703), long period between design and tendering (0.701) and project financing are the five major important factors influencing cost of construction project delivery in Rivers State Nigeria. The table also review that inadequate labour availability with relative importance index (0.513) and relationship between management and labour having RII (0.513) as the least factors influencing cost of construction project delivery in Nigeria. This is likely because a significant portion of labour in the Nigerian construction industry are indigene, especially unskilled labour, is locally sourced. Therefore, this factor does not significantly impact the cost of delivering construction projects.

Table 2.4 Summary of relative importance index (RII) for Assessing the Severity Rankings of Factors Among, Consultants, Contractors and clients

S/N	Factors	1	2	3	4	5	RII	RANK
1	Incorrect planning	20	20	20	20	33	0.646	8 th
2	Cost of materials	20	30	20	20	23	0.593	10 th

3	Wrong method of estimation	10	10	20	30	43	0.752	2 nd
4	Contract management	20	20	10	30	33	0.664	5 th
5	Fluctuation of prices	10	25	25	30	23	0.655	6 th
6	Previous experience	30	30	20	20	13	0.522	14 th
7	Absence of construction cost data	10	25	30	20	28	0.655	6 th
8	Additional cost	5	13	14	40	41	0.703	3 rd
9	Frequent design changes	10	20	20	30	33	0.699	4 th
10	Inadequate raw materials	0	15	25	40	33	0.761	1 st
11	Poor financial control	30	20	30	20	13	0.539	12 th
12	Economic stability	25	25	40	10	13	0.531	13 th
13	Fraudulent practices	30	25	25	13	20	0.543	11 th
14	Suppliers manipulation	15	45	30	20	3	0.513	15 th
15	Currency exchange	10	40	10	20	33	0.646	8 th

Source: Field Data, 2025.

The results in table 2.3 above shows 15 major important factors influencing cost of construction project delivery in Nigeria as perceived by the consultants, contractors and the clients. They all ranked inadequate raw materials with the relative importance index (0.761) as the most important factors influencing cost of construction project delivery in Rivers State, Nigeria seconded by wrong methods of estimation with RII (0.752), additional cost with RII (0.703), frequent design changes (0.699) and down to suppliers manipulation (0.513) as the factors influencing cost of construction project delivery.

Table 2.5: Summary of mean and standard deviation for Strategies for reducing cost of construction project delivery in Rivers State, Nigeria

Descriptive Statistics							
	N	Minimum	Maximum	Mean		Std. Deviation	Variance
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic
Optimized Project Planning	113	3.00	5.00	4.6251	.04768	.50449	.256
Value Engineering	113	2.00	4.00	2.7769	.05186	.54872	.302
Material Selection	113	3.00	5.00	4.6439	.04723	.49969	.251
Efficient Resource Management	113	2.00	5.00	3.0447	.06265	.66291	.449
Effective Supplier Management	113	2.00	5.00	3.6608	.06659	.70461	.497
Energy Efficiency	113	2.00	5.00	4.6251	.05094	.53903	.292
Standardization and Modular Construction	113	1.00	5.00	3.9287	.07256	.76775	.599
Contractor Selection and Management	113	2.00	5.00	3.7858	.05734	.60671	.369
Risk Management	113	2.00	5.00	4.5983	.05596	.59215	.352
Lean Construction Practices	113	2.00	5.00	2.8662	.07342	.77688	.605
Maintenance Planning	113	1.00	5.00	2.0189	.07395	.78259	.613
Community Engagement	113	3.00	5.00	4.5537	.05206	.55084	.304

Technology Adoption	113	2.00	5.00	3.7055	.05175	.54754	.310
Government Policies and Regulations	113	1.00	4.00	2.6787	.05414	.57288	.329
Continuous Improvement	113	2.00	5.00	3.6787	.04948	.52359	.275
Valid N (listwise)	113						

The result in table 2.4 above shows 15 strategies used in reducing cost of construction project delivery in Rivers State, Nigeria. After applying the Mean Item Score (MIS), it was seen that material selection has the highest MIS value (4.64), seconded by optimizing project planning with the MIS value (4.62), energy efficiency (4.62), risk management (4.49), community engagement (4.55) and down to maintenance planning with Mean Item Score value (2.01).

5. Discussion of Findings

Based on the findings with respect of this study on factors influencing cost of construction project delivery in Rivers State, Nigeria, the stakeholders which the consultants, contractors and the clients unanimously agree that the cost of transportation is the primary factor influencing cost of construction project delivery in Rivers State, Nigeria, aligning with findings from Abdulaziz and Al-Juwairah (2002) regarding Saudi Arabia. Consultants prioritize wrong methods of estimation next, reflecting their awareness of different techniques and precision in estimation. Contractors also highlight this issue, though it ranks lower for clients. Long period between design and tendering is identified as the third most significant factor influencing cost of construction project delivery by consultants.

These findings mirror Abdulaziz and Al-Juwairah's observations in Saudi Arabia. Clients emphasize project financing as a critical factor, ranking it fifth. Omoregie and Radfort (2005) similarly highlighted this issue in Nigeria, attributing it to exchange rate limitations affecting material prices. Contractors stress absence of construction cost data as detrimental to construction costs, echoing Kangari's (1989) perspective on management incompetence. This factor is ranked forth by contractors and fourth by consultants, who rely on cost engineers or cost economist (i.e. quantity surveyors) for accurate estimates. Ogunsemi and Jagboro (2006), Highlighted that the lack of reliable construction cost data leads to poor cost estimation and budgeting. This often results in significant cost overruns.

While there is disagreement among stakeholders on the ranking of these factors, contractors and consultants show more alignment, consistent with Abdulaziz and Al-Juwairah's findings. Efficient time management through resource planning, duration estimation, and schedule control is perceived as the most effective cost reduction method in Nigeria by all parties. Ashworth (2000) noted that profitable firms might achieve their revenue by eliminating waste at both professional and trade practice levels. He recommended several cost reduction strategies or measures, including: clearly defining the project requirements and features from the start, preparing the project team by having members commit to their capabilities and responsibilities, ensuring the project stays on track with contract clauses that prevent major changes once underway, managing human resources effectively through motivation, and tracking the project to identify and correct dead-end paths early.

Conclusion and recommendations

The primary factors influencing cost of construction project delivery in Nigeria, identified by stakeholders, include high cost of transportation, absence of construction cost data, long period between design and tendering and project financing. High construction costs adversely affect stakeholders and the industry, leading to project abandonment, reduced building activity, and reputational damage. Implementing suggested solutions could restore client confidence, mitigate investment risks, and enhance industry sustainability. The cost engineers or cost economist (i.e quantity surveyors), play a vital role in managing and mitigating these factors. Economic approaches are recommended for identifying and addressing cost drivers in Nigerian construction, thereby bolstering industry viability and sustainability. The study also recommended that the consultants, contractors and clients as a matter of urgency, should utilize these strategies for reducing cost of construction project delivery such as optimizing Project Planning, effective resource management, technology adoption, community engagement, government policies and regulations and so on which will help in bringing about transparency, integrity and accountability in the delivery of construction projects in Nigeria and add value for money. The government needs to focus on stabilizing the economy to lessen the effects of inflation and currency variations on construction expenses. Supporting the local manufacturing of construction materials could decrease reliance on imports and reduce material costs. There should be encouragement for investing in domestic industries. Adopting effective project management practices, such as thorough planning, scheduling, and resource management, can help minimize inefficiencies and prevent cost overruns.

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About the Authors



Godson Kelechi, M.Sc

Rivers State University
Port Harcourt, Nigeria



Godson Kelechi is an assistant Lecturer at Rivers State University, Port Harcourt and a probationer (member) of the Nigerian Institute of Quantity Surveyors (NIQS). He holds a Bachelor of Technology (B.Tech.) in the Department of Quantity Surveying with Second Class Upper Division at Rivers State University, Port Harcourt and Master of Science (M.Sc) in Project Management Technology from Federal University of Technology Owerri, Imo State and currently pursuing his Doctor of Philosophy Degree (Ph.D) in Construction Management at the Department of Building, Federal University of Technology Owerri, Imo State. He hails from Egwi, in Etche Local Government Area of Rivers State, Nigeria. Godson Kelechi can be contacted at godsonkelechi44@gmail.com



Nwogu Prince Chinemerem, M.Sc

Rivers State University
Port Harcourt, Nigeria



Nwogu Prince Chinemerem is a staff of Rivers State University, Port Harcourt and a Professional Member of the Nigerian Institute of Quantity Surveyors (NIQS). He holds a Bachelor of Technology (B.Tech.) in Quantity Surveying from the Rivers State University, Port Harcourt and Master of Science (M.Sc) in Project Management Technology from the Federal University of Technology Owerri, Imo State and currently pursuing his Doctor of Philosophy Degree (Ph.D.) in Construction Management at the Department of Building, Federal University of Technology Owerri, Imo State. Nwogu Prince Chinemerem can be contacted at prince.nwogu1@ust.edu.ng