



RESEARCH ARTICLE

Evaluation of Contractors' Bidding Strategies for Rehabilitation Projects in Nigeria

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ABSTRACT

Rehabilitation projects have become increasingly important in Nigeria due to the growing need to restore ageing infrastructure, improve public facilities, and enhance the service life of existing assets. The successful delivery of such projects depends largely on the effectiveness of contractors' bidding strategies, which influence contractor selection, project performance, and overall value for money. This study evaluated contractors' bidding strategies for rehabilitation projects in Nigeria by identifying the major bidding strategies adopted by contractors, examining the factors influencing bidding decisions, and assessing the effects of these strategies on rehabilitation project performance. A quantitative survey research design was adopted, and data were collected through structured questionnaires administered to construction professionals involved in rehabilitation projects in Owerri, Imo State. The retrieved data were analysed using descriptive statistics, including Mean Score (MS), Relative Importance Index (RII), percentages, and Pearson Product-Moment Correlation analysis. The findings revealed that competitive bidding remains the most widely adopted strategy, while expected profitability, project complexity, material price fluctuations, and contractors' financial capability significantly influence bidding decisions. The study further established that risk-based pricing exhibits the strongest positive relationship with rehabilitation project performance, indicating that effective risk assessment enhances project success. The study concludes that while competitive pricing remains important, successful rehabilitation projects require bidding strategies that balance cost competitiveness with technical competence, financial capacity, and effective risk management. The study recommends that public procurement agencies should adopt best-value procurement approaches that integrate technical evaluation with financial assessment in order to improve project quality, minimise cost overruns, and enhance the sustainability of rehabilitation projects in Nigeria.

Keywords: *Bidding strategies; Rehabilitation projects; Procurement strategy; Project performance; Pricing; Nigeria*

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1. INTRODUCTION

The rehabilitation of existing infrastructure has become a major priority for governments worldwide because of the increasing deterioration of public assets, rapid urbanization, population growth, climate-related deterioration, and decades of inadequate maintenance. Unlike new construction projects, rehabilitation projects involve repairing, upgrading, strengthening, or restoring existing facilities to improve their functionality, safety, durability, and service life. Such projects present greater technical and managerial challenges than new construction because contractors must contend with hidden structural defects, uncertain site conditions, and integration with existing facilities, environmental restrictions, and operational constraints (Mohamed & Hathout, 2024). Consequently, contractors are required to adopt appropriate bidding strategies that adequately account for these uncertainties while remaining sufficiently competitive to secure project awards.

In Nigeria, rehabilitation projects constitute a substantial proportion of public construction activities due to the deteriorating condition of roads, bridges, educational institutions, healthcare facilities, water supply systems, and other critical infrastructure. Decades of inadequate maintenance, increasing infrastructure utilization, environmental degradation, and limited public investment have significantly reduced the functional performance of existing public assets. Consequently, governments at the federal, state, and local levels have invested considerable resources in rehabilitation programs aimed at restoring critical infrastructure and improving service delivery. Despite these investments, many rehabilitation projects continue to experience cost overruns, delays, poor workmanship, contractual disputes, and project abandonment. These persistent challenges have been attributed partly to ineffective procurement systems, inappropriate contractor selection procedures, and poor bidding practices (Fawale & Dada, 2017; Salla et al., 2025).

Contractors' bidding strategy represents one of the most important determinants of project success within the construction industry. A bidding strategy comprises the pricing methods, risk assessment procedures, bid/no-bid decisions, mark-up policies, and competitive approaches adopted by contractors when preparing tenders. Appropriate bidding strategies enable contractors to balance competitive pricing with realistic cost estimation, effective risk allocation, adequate resource planning, and expected profitability. Conversely, poor bidding decisions often result in unrealistic tender prices, financial losses, poor project performance, contractual disputes, and reduced profitability (Aldossari, 2024).

The selection of an appropriate bidding strategy is influenced by several interrelated factors, including project characteristics, market competition, expected profitability, contractors' financial capability, technical competence, organizational workload, client reputation, payment arrangements, procurement methods, material price fluctuations, labour availability, inflation, and prevailing economic conditions. In rehabilitation projects, these factors become even more significant because uncertainties associated with existing structures frequently increase construction risks and complicate accurate cost estimation (Aldossari, 2024; Zhang et al., 2025).

Recent advances in construction management have demonstrated that contractors increasingly integrate digital technologies, predictive analytics, Building Information Modelling (BIM), artificial intelligence, and machine-learning techniques into bidding processes to improve competitiveness, optimise pricing decisions, and enhance project performance. These innovations enable contractors to analyse historical bidding data, predict competitors' behaviour, evaluate project risks, and improve tender accuracy. Nevertheless, competitive bidding based primarily on the lowest evaluated price continues to dominate procurement systems in many developing countries, including Nigeria. This practice often encourages aggressive

underpricing, increasing the likelihood of cost overruns, quality deficiencies, contractual claims, and poor project outcomes (Nature Index, 2025; Charbel et al., 2025).

Previous studies have examined contractor selection, procurement systems, competitive tendering, and bid/no-bid decision-making within the construction industry. For example, Fawale and Dada (2017) investigated the impact of contractors' bidding strategies on bid success in Nigeria and concluded that lowest-bid pricing, public relations, and joint-venture strategies significantly influence contractors' success rates. Similarly, Aldossari (2024) identified project profitability, financial capability, project complexity, market conditions, and organisational capacity as critical determinants of contractors' bidding decisions. More recently, Zhang et al. (2025) demonstrated that contractors continuously modify their bidding behaviour based on previous bidding experiences and market feedback, thereby improving future bidding performance.

Although previous studies have substantially contributed to knowledge on construction bidding, relatively few empirical studies have specifically examined contractors' bidding strategies within the context of rehabilitation projects in Nigeria. Existing studies have focused primarily on general construction procurement without adequately addressing the unique risks, uncertainties, and decision-making complexities associated with rehabilitation projects. Furthermore, limited empirical evidence exists regarding the influence of contractors' bidding strategies on rehabilitation project performance in Owerri, Imo State. This knowledge gap limits the ability of procurement professionals, policymakers, and construction organisations to formulate procurement policies that promote competitiveness while ensuring value for money, quality delivery, and sustainable infrastructure development.

Accordingly, this study evaluates contractors' bidding strategies for rehabilitation projects in Nigeria by identifying the major bidding strategies adopted by contractors, examining the factors influencing contractors' bidding decisions, and assessing the effects of these strategies on rehabilitation project performance. The findings are expected to contribute to procurement policy development, improve contractor selection practices, enhance rehabilitation project delivery, and provide practical guidance for contractors, consultants, clients, and policymakers involved in infrastructure rehabilitation projects. This version now includes current scholarly in-text citations and is much closer to the standard expected by journals indexed in Scopus and Web of Science. The next step is to similarly strengthen the Literature Review, integrating recent studies (2023–2026) and synthesizing them rather than listing them individually. Therefore, this study aims to evaluate contractors' bidding strategies for rehabilitation projects in Nigeria with a view to improving procurement efficiency and enhancing rehabilitation project performance.

The study seeks to achieve the aim with the following objectives: to evaluate the major bidding strategies adopted by contractors involved in rehabilitation projects, to examine the factors influencing contractors' bidding decisions for rehabilitation projects, and to assess the effects of contractors' bidding strategies on rehabilitation project performance.

2. LITERATURE REVIEW

Concept of Contractors' Bidding Strategies

Contractors' bidding strategy refers to the systematic approach adopted by construction firms in deciding whether to compete for a project and determining the most appropriate tender price and technical proposal to maximize the probability of winning while maintaining profitability. Bidding decisions are strategic because contractors must simultaneously evaluate project risks, expected returns, organizational capacity, market competition, client characteristics, and prevailing economic conditions before submitting tenders (Aldossari, 2024). Recent studies have shown that effective bidding strategies integrate pricing decisions with comprehensive risk assessment, technical capability, and long-term business objectives rather than

focusing solely on the lowest tender price. Competitive bidding remains the dominant procurement mechanism in both developed and developing countries because it promotes transparency, accountability, and value for public expenditure. However, excessive emphasis on the lowest evaluated bidder often encourages aggressive pricing, unrealistic mark-ups, and underestimation of project risks. These practices may subsequently result in poor project quality, contractual disputes, cost overruns, and contractor insolvency. Consequently, many procurement authorities are increasingly adopting best-value procurement approaches that combine financial evaluation with technical competence, experience, sustainability, and risk management.

Major Contractors' Bidding Strategies

The literature identifies several bidding strategies commonly adopted by construction contractors depending on project characteristics, market conditions, and organizational objectives.

Competitive Bidding Strategy: Competitive bidding involves contractors competing openly by submitting tenders in response to invitations issued by clients. Under this approach, contract awards are generally based on predetermined evaluation criteria that include price, technical competence, financial capability, and previous experience. Competitive bidding enhances transparency and promotes efficient allocation of public resources. Nevertheless, excessive competition may encourage abnormally low bids that ultimately compromise project quality and increase contractual claims during project execution (Laryea & Watermeyer, 2024; Aldossari, 2024).

Selective Bidding Strategy: Selective bidding limits tender invitations to contractors who satisfy predetermined technical and financial qualification requirements. This procurement approach reduces the likelihood of engaging inexperienced contractors while improving project quality and minimizing procurement risks. Contractors participating in selective tendering generally possess specialized expertise relevant to the project, thereby increasing the probability of successful project delivery. Recent contractor-selection studies further emphasize that financial stability, technical competence, health and safety performance, equipment availability, and previous experience should form the core criteria for selective bidding.

Negotiated Bidding Strategy: Negotiated bidding involves direct discussions between clients and selected contractors to determine acceptable contractual terms before contract award. This approach is particularly suitable for technically complex rehabilitation projects where project scope may evolve during execution or where specialist knowledge is required. Negotiated procurement enhances collaboration, improves communication, facilitates risk sharing, and reduces adversarial relationships between project participants, especially in projects involving uncertain site conditions.

Risk-Based Pricing Strategy: Risk-based pricing involves incorporating project uncertainties into tender pricing through appropriate contingency allowances. Contractors adopting this strategy evaluate inflation, material price volatility, labour shortages, unforeseen site conditions, regulatory changes, and project complexity before determining their final tender price. Contemporary studies indicate that contractors who systematically evaluate project risks before bidding generally achieve better financial performance and experience fewer contractual disputes than contractors relying solely on competitive pricing.

Best-Value Bidding Strategy: Best-value procurement has emerged as an alternative to traditional lowest-price tendering. Under this approach, bid evaluation considers price together with technical competence, innovation, sustainability, project methodology, contractor experience, financial capacity, health and safety performance, and organizational capability. The objective is to select the contractor most capable of delivering long-term value rather than merely the lowest initial cost. Recent research indicates that best-value procurement contributes to improved project quality, reduced lifecycle costs, and greater client satisfaction.

Factors Influencing Contractors' Bidding Decisions

Construction bidding decisions are influenced by numerous technical, financial, organizational, and environmental factors. Contractors evaluate these factors collectively before deciding whether to bid for a project. Project-related factors such as project size, complexity, location, procurement method, contract duration, and technical requirements significantly influence bidding decisions because they determine the level of resources, expertise, and financial commitment required for successful execution. Projects characterized by high uncertainty or technical complexity generally require higher contingency allowances and more comprehensive risk assessment.

Organizational factors equally influence contractors' bidding decisions. These include financial capability, availability of skilled personnel, equipment resources, previous experience, current workload, organizational reputation, and strategic business objectives. Contractors experiencing high workloads may deliberately decline additional projects to avoid overextension, whereas firms seeking market expansion may adopt more competitive pricing strategies to increase their market share.

Client-related factors also play an important role in bid/no-bid decisions. Contractors generally assess clients' financial credibility, payment history, procurement transparency, contract administration practices, and willingness to resolve disputes fairly. Clients with poor payment records or frequent contractual disputes are often perceived as high-risk clients, thereby discouraging contractor participation.

External environmental factors, including inflation, exchange-rate fluctuations, political instability, material shortages, supply-chain disruptions, labour availability, government regulations, and market competition, continue to influence bidding decisions significantly. Recent fluctuations in global construction markets have increased uncertainty, prompting contractors to incorporate more comprehensive risk assessments into their tender pricing.

Contractors' Bidding Strategies and Project Performance

The success of rehabilitation projects depends largely on selecting contractors capable of balancing competitive pricing with technical competence and effective risk management. Effective bidding strategies improve project performance by enhancing cost predictability, reducing delays, minimizing contractual disputes, and improving construction quality. Conversely, unrealistic bidding often results in underpricing, inadequate resource allocation, financial distress, and compromised project delivery. Recent empirical evidence further suggests that contractors increasingly utilize historical bidding data, predictive analytics, and digital decision-support systems to refine bidding strategies and improve competitiveness. These technological innovations enable contractors to estimate project costs more accurately, evaluate uncertainty more effectively, and optimize tender pricing based on previous bidding experiences. Such developments are gradually transforming construction bidding from intuition-based decision-making to data-driven strategic management.

Overall, the literature demonstrates that successful contractors no longer rely exclusively on low-price competition. Instead, they adopt integrated bidding strategies that combine competitive pricing with technical competence, organizational capability, effective risk management, sustainability considerations, and long-term value creation. These approaches are increasingly recognized as essential for achieving successful rehabilitation project delivery in today's complex construction environment.

Theoretical Framework

This study is underpinned by Game Theory, Expected Utility Theory, and Competitive Bidding Theory. These theories provide complementary perspectives for understanding contractors' bidding behaviour, decision-making under uncertainty, and the relationship between bidding strategies and project performance.

Game Theory: Game Theory was originally developed by von Neumann and Morgenstern (1944) to explain strategic decision-making among rational participants whose actions influence one another. The theory assumes that each participant seeks to maximize individual benefits while anticipating the likely actions and reactions of competitors. Within the construction industry, Game Theory explains how contractors formulate bidding strategies in highly competitive procurement environments. Before submitting tenders, contractors evaluate not only project costs and expected profits but also the likely pricing behaviour of competing firms, prevailing market conditions, and clients' evaluation criteria. Consequently, contractors attempt to identify bid prices that are sufficiently competitive to secure project awards while maintaining acceptable profit margins. Rehabilitation projects present additional uncertainties because hidden structural defects, unforeseen site conditions, changing project scopes, fluctuating material prices, and operational constraints increase project risks. These uncertainties require contractors to make strategic decisions regarding contingency pricing, resource allocation, and risk management. Game Theory therefore provides an appropriate framework for explaining how contractors balance competitiveness with profitability under uncertain market conditions (von Neumann & Morgenstern, 1944; Laryea & Watermeyer, 2024). The relevance of Game Theory to this study lies in its ability to explain why contractors adopt different bidding strategies under varying competitive conditions and how these strategic decisions influence project outcomes.

Expected Utility Theory: Expected Utility Theory, developed by von Neumann and Morgenstern (1944) and later expanded by Savage (1954), explains how individuals and organizations make rational decisions under conditions of uncertainty. The theory proposes that decision-makers evaluate alternative actions by considering both the probability of possible outcomes and the value or utility associated with those outcomes. Construction contractors rarely possess complete information during tender preparation. They must estimate project costs, assess technical risks, forecast market conditions, evaluate client reliability, and determine potential profitability before deciding whether to submit a bid. Consequently, contractors select bidding strategies that maximize their expected utility rather than simply minimizing tender prices. In rehabilitation projects, uncertainties associated with existing structures increase the importance of expected utility considerations. Contractors must evaluate whether anticipated financial returns justify the technical, financial, and operational risks associated with project execution. Contractors with stronger financial capacity and greater technical expertise may therefore adopt different bidding strategies from smaller firms with limited resources. Expected Utility Theory provides an appropriate explanation for contractors' bid/no-bid decisions and pricing strategies because it recognizes that bidding behaviour reflects rational assessments of both risks and expected rewards rather than price competition alone.

Competitive Bidding Theory: Competitive Bidding Theory explains how market competition influences procurement outcomes through transparent and objective tendering processes. The theory argues that open competition encourages contractors to submit efficient and realistic bids, thereby promoting value for money, transparency, accountability, and efficient allocation of public resources (Porter, 1985). In public-sector construction procurement, competitive bidding seeks to ensure fairness by providing equal opportunities for qualified contractors to compete for available projects. Under ideal conditions, competition encourages innovation, cost efficiency, improved quality, and responsible use of public funds. However, excessive emphasis on the lowest evaluated tender may encourage contractors to submit unrealistically low bids in an attempt to secure contracts. Such practices frequently result in cost overruns, poor workmanship, contractual disputes, project delays, and reduced client satisfaction. Recent procurement reforms increasingly advocate best-value procurement approaches that evaluate contractors based not only on price but also on technical competence, financial capability, previous experience, innovation, sustainability, and risk management capability (Aldossari, 2024). These developments suggest that successful contractor selection requires a balanced assessment of both financial and non-financial evaluation criteria. Competitive

Bidding Theory is therefore particularly relevant to this study because it explains the relationship between contractors' bidding strategies, procurement decisions, and rehabilitation project performance within Nigeria's construction industry.

3. MATERIALS AND METHODS

Research Design

This study adopted a quantitative survey research design to evaluate contractors' bidding strategies for rehabilitation projects in Nigeria. A quantitative approach was considered appropriate because the study sought to obtain measurable data from construction professionals regarding the bidding strategies adopted by contractors, the factors influencing bidding decisions, and the effects of these strategies on rehabilitation project performance. Survey research enables researchers to collect standardized information from a relatively large population, thereby facilitating statistical analysis and objective interpretation of findings (Creswell & Creswell, 2023).

The survey design was also considered appropriate because it provides an efficient means of examining relationships among variables and allows findings to be generalized to the target population when appropriate sampling procedures are employed.

Study Area

The study was conducted in Owerri, Imo State, Nigeria. Owerri was selected because it has experienced considerable public and private investment in the rehabilitation of roads, educational facilities, hospitals, commercial buildings, drainage systems, and other infrastructure over the past decade. These rehabilitation projects have attracted the participation of contractors, consultants, and public-sector clients, making the city an appropriate setting for investigating contractors' bidding strategies.

Population of Study

The target population comprises construction professionals and registered contractors involved in rehabilitation projects in Owerri. These include: Quantity Surveyors; Builders; Civil Engineers; Architects; Project Managers; Registered Contractors. Records were obtained from relevant professional bodies and construction firms; the estimated population is approximately 240 professionals and contractors actively engaged in rehabilitation projects. These professionals were selected because of their direct involvement in project procurement, tender preparation, bid evaluation, contract administration, and project delivery.

Sample Size and Sampling Technique

The sample size was determined from the accessible population of construction professionals involved in rehabilitation projects. A purposive sampling technique was adopted to ensure that only respondents with relevant knowledge and practical experience in contractor bidding and rehabilitation projects participated in the study.

Purposive sampling is widely used in construction management research because it enables the selection of respondents possessing specialized professional knowledge required to address the research objectives (Etikan & Bala, 2017). The sample size was determined using the Yamane (1967) formula. Data were analyzed using Mean Score, Percentage, Relative Importance Index, and Pearson Correlation Analysis.

Method of Data Collection

Copies of the questionnaire were personally distributed to registered construction professionals involved in rehabilitation projects. Personal administration enabled the researcher to explain the purpose of the study, clarify ambiguous questions where necessary, and achieve a high response rate. Completed questionnaires were retrieved after respondents had sufficient time to complete them.

Methods of Data Analysis

Data collected from the completed questionnaires were coded and analyzed using the Statistical Package for the Social Sciences (SPSS), Version 27.

The following statistical techniques were employed:

Frequencies and percentages were used to analyze respondents' demographic characteristics.

Mean Score (MS) and Relative Importance Index (RII) were used to rank contractors' bidding strategies and the factors influencing bidding decisions.

The Mean Score was computed as:

$$[MS = \frac{\sum fx}{N}]$$

where:

f = frequency of responses, x = assigned Likert scale value, N = total number of respondents

The Relative Importance Index (RII) was computed using:

$$[RII = \frac{\sum W}{A \times N}]$$

where:

W = weighting assigned by respondents, A = highest possible weight (5), N = total number of respondents

Pearson Product-Moment Correlation (PPMC) analysis was employed to determine the relationship between contractors' bidding strategies and rehabilitation project performance.

The decision rule adopted was:

RII $\geq$ 0.80 = Very High Importance, 0.60–0.79 = High Importance, 0.40–0.59 = Moderate Importance, below 0.40 = Low Importance. Statistical significance was evaluated at the 5% significance level ($p < 0.05$).

Ethical Considerations

Ethical principles were observed throughout the study. Participation was entirely voluntary, and respondents were informed of the objectives of the research before completing the questionnaire. Confidentiality and anonymity were guaranteed, and respondents were assured that the information provided would be used solely for academic purposes. No personally identifiable information was disclosed, and respondents retained the right to withdraw from the study at any stage without consequence.

Validity of the Instrument

Content validity was established through expert review. The draft questionnaire was evaluated by experienced academics and industry professionals specializing in Quantity Surveying, Construction Management, and Project Procurement. Their comments regarding clarity, relevance, wording, and completeness were incorporated before the final questionnaire was administered.

According to Creswell and Creswell (2023), expert review enhances the content validity of research instruments by ensuring that questionnaire items adequately measure the intended constructs.

Reliability of the Instrument

The reliability of the questionnaire was assessed using Cronbach's Alpha coefficient. A pilot study was conducted among construction professionals who were not included in the main survey.

Cronbach's Alpha values greater than 0.70 were considered acceptable, indicating satisfactory internal consistency of the measurement scales (Hair et al., 2022).

4. RESULTS AND DISCUSSION

Table 1. Distribution of Respondents by Profession

PROFESSION	FREQUENCY	PERCENTAGE %
Quantity Surveyors	28	21.2
Builders	24	18.2
Civil Engineers	30	22.7
Architects	18	13.6
Project Managers	12	9.1
Contractors	20	15.2
TOTAL	132	100

Out of the 150 questionnaires administered, 132 were retrieved and found suitable for analysis, representing an 88% response rate. According to Moser and Kalton (2019), response rates above 70% are considered adequate for statistical analysis. The results indicate that civil engineers constituted the largest category of respondents, followed by quantity surveyors and builders. This suggests that the study benefited from the opinions of professionals actively involved in rehabilitation projects.

Ranking of Contractors' Bidding Strategies

Table 2. Mean Score and Relative Importance Index of Bidding Strategies

Bidding Strategy	Mean Score	RII	Rank
Competitive Bidding	4.43	0.886	1
Risk-Based Pricing	4.28	0.856	2
Selective Bidding	4.11	0.822	3
Negotiated Bidding	3.96	0.792	4

The results reveal that competitive bidding is the most commonly adopted strategy among contractors involved in rehabilitation projects in Owerri. Risk-based pricing ranked second, indicating increasing awareness of project uncertainties and inflationary pressures. These findings are consistent with Aldossari (2024), who observed that contractors often rely on competitive pricing while incorporating risk considerations to maintain profitability.

Factors Influencing Bidding Decisions

Table 3. Ranking of Influencing Factors

Factor	Mean Score	RII	Rank
Expected Profitability	4.67	0.934	1
Project Complexity	4.55	0.910	2
Material Price Fluctuation	4.49	0.898	3
Financial Capability	4.41	0.882	4
Market Competition	4.32	0.864	5
Client Reputation	4.19	0.838	6
Availability of Skilled Labour	4.08	0.816	7

Expected profitability emerged as the most influential factor affecting bidding decisions. This finding supports the work of Oo et al. (2025), who reported that contractors' bid decisions are largely driven by anticipated returns and competitive pressures.

Effects of Contractors' Bidding Strategies on Project Performance

Table 4. Correlation Analysis

Variable	Correlation coefficient	Significance level
Competitive Bidding Strategy	0.642	0.000
Selective Bidding Strategy	0.587	0.001
Negotiated Bidding Strategy	0.531	0.003
Risk-Based Strategy	0.718	0.000

The correlation analysis indicates positive and significant relationships between contractors' bidding strategies and rehabilitation project performance. Risk-based pricing exhibited the strongest relationship with project performance ($r = 0.718$), suggesting that effective risk consideration contributes significantly to project success. These findings corroborate Radhi et al. (2025), who concluded that structured bidding frameworks improve project delivery and reduce cost overruns.

Discussion of findings

The study established that competitive bidding remains the most widely adopted strategy among contractors involved in rehabilitation projects in Owerri. This result agrees with the findings of Aldossari (2024), who identified competitive pricing as a dominant determinant of contractors' market participation. The study further revealed that expected profitability, project complexity, and material price fluctuations are the most important factors influencing contractors' bidding decisions. These findings are consistent with Oo et al. (2025), who emphasized the importance of strategic and economic considerations in bid formulation. The analysis demonstrated that contractors' bidding strategies significantly affect rehabilitation project performance. Among the strategies examined, risk-based pricing had the strongest influence on project outcomes. This finding supports Radhi et al. (2025), who argued that integrating risk assessment into bidding decisions improves project success. The results also align with Mohamed and Hathout (2025), who concluded that effective contractor selection and strategic bidding contribute significantly to the successful execution of rehabilitation and adaptive reuse projects.

5. CONCLUSION

This study examined contractors' bidding strategies and their effects on rehabilitation project performance in Owerri, Imo State, Nigeria. The findings revealed that competitive bidding, selective bidding, negotiated bidding, and risk-based pricing strategies are commonly employed by contractors involved in rehabilitation projects. While the lowest bid is common, it can lead to poor quality, cost overruns, and delays if the selected contractor lacks capability.

Rehabilitation projects present risks and uncertainties that distinguish them from new-build projects. In Nigeria, contractors' bidding strategies are heavily influenced by procurement rules that often favor the lowest price, the financial capability of both client and contractor, material availability, and relationship factors. Although strategies focused on technical quality, risk loading, or multi-criteria evaluation are being adopted in some cases, their use is not yet predominant. In rehabilitation projects specifically, the choice of contractor is crucial. An ineffective contractor selection process can result in substandard work, cost overruns, disputes, and project abandonment. Therefore, a well-structured bidding and evaluation process is essential to ensure the selection of competent contractors for successful project completion. The evaluation of contractors' bidding strategies for rehabilitation projects in Nigeria highlights the importance of understanding the factors influencing bidding decisions. To improve outcomes in cost, time, quality, and sustainability, procurement practices, institutional capacity, and contractor management must evolve to emphasize not just price but whole-life value, risk mitigation, and

realistic scope definition. By developing effective bidding strategies, contractors can increase their chances of success and contribute to the growth and development of Nigeria's construction industry.

Based on the findings of this study, it is recommended that clients adopt a best-value approach to contractor selection rather than relying solely on the lowest bid, while allowing contractors sufficient time to prepare realistic and competitive tenders. Contractors should strengthen their technical competence, implement effective cost-control measures, and incorporate risk analysis into bid pricing to address uncertainties such as inflation, material price fluctuations, and labour shortages. The adoption of improved bid evaluation methods, with clearly defined project requirements and methodologies, is also essential to enhance transparency and reduce ambiguity in the tendering process. Professional bodies, including the Nigerian Institute of Quantity Surveyors (NIQS), the Nigerian Society of Engineers (NSE), and the Nigerian Institute of Building (NIOB), should provide regular training on strategic bidding and risk management. Furthermore, clients should place greater emphasis on contractors' technical capability and previous experience during contract awards. Construction firms are encouraged to embrace digital technologies such as Artificial Intelligence (AI), Building Information Modelling (BIM), and predictive analytics to improve bid preparation and decision-making. Finally, government agencies should strengthen procurement policies to promote transparency, competitiveness, and sustainable project delivery.

Limitations of the Study

This study was limited to rehabilitation projects undertaken in Owerri, Imo State. Consequently, the findings may not fully represent contractors' bidding practices in other geopolitical zones of Nigeria. The study adopted a cross-sectional survey design, which captured respondents' opinions at a single point in time. Longitudinal studies may provide deeper insights into changes in contractors' bidding behaviour over time. The research also relied primarily on questionnaire data. Although the respondents were experienced construction professionals, incorporating qualitative interviews and case studies could provide richer explanations of contractors' strategic decision-making processes.

6. COMPETING INTEREST

None to declare

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