

Influence of Consultants' Characteristics on Procurement Performance in Public Construction Projects in Abuja, Nigeria

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Abstract

Consultants are pivotal to public construction procurement, serving as professional intermediaries who convert policy objectives into technical and contractual outcomes. Despite this strategic role, consultant-related shortcomings continue to weaken procurement effectiveness in Nigeria, particularly in federally administered projects in Abuja. This study investigates the key characteristics required for effective consultant participation in public construction procurement in Abuja, Nigeria. A mixed-methods approach using a convergent parallel design was adopted. Quantitative data were collected through structured questionnaires administered to 391 public construction stakeholders, while qualitative data were obtained through semi-structured interviews conducted with 8 public construction stakeholders. Quantitative analysis employed descriptive statistics and the Kruskal–Wallis test, complemented by thematic analysis of qualitative data. Results show that technical expertise ranked highest among consultant characteristics (Mean = 4.62), followed by resourcefulness (Mean = 4.54), project management skills (Mean = 4.53), and communication attributes such as active listening and self-confidence (Mean = 4.49 each). Ethical integrity (Mean = 4.30), risk management capability (Mean = 4.29), and commitment to quality and timeliness (Mean = 4.28) were also strongly emphasised. Significant differences existed across stakeholder groups in attribute prioritisation (Kruskal–Wallis $H = 10.822$, $df = 4$, $p = .029$). Qualitative findings identified professional licensure, regulatory compliance and ethical conduct as baseline requirements, while digital proficiency and contextual awareness emerged as underdeveloped competencies. The study concludes that consultant performance is multidimensional and recommends a standardised, context-sensitive evaluation framework to enhance accountability, value for money and public project outcomes.

Keywords: Consultancy characteristics, public procurement, construction projects, Abuja Nigeria, consultant performance.

1. Introduction

Public construction procurement constitutes a primary mechanism through which governments deliver infrastructure that supports economic growth, social development and national competitiveness. In Nigeria, public sector construction accounts for a substantial share of capital expenditure, with Abuja serving as the administrative and operational hub for many federally funded projects. Within this environment, consultants including architects, engineers, quantity surveyors and project managers play a pivotal role in shaping procurement outcomes through their professional expertise, advisory functions and supervisory responsibilities.

Consultancy practice in construction involves the delivery of specialised professional services to support informed decision-making and ensure effective project execution (Ofori, 2022). Consultants are responsible for feasibility studies, design development, cost estimation, procurement planning, tender evaluation, contract administration and supervision. These functions directly influence project cost, time, quality and regulatory compliance, particularly in public projects governed by statutory procurement frameworks (Kangwa & Oladinrin, 2023). As intermediaries between clients, contractors and regulatory authorities, consultants occupy a strategic position in determining whether public construction projects meet technical, financial and administrative expectations.

Public construction procurement in Nigeria is regulated by the Public Procurement Act (2007) and administered through the Bureau of Public Procurement (BPP). The process encompasses needs assessment, procurement planning, tendering, bid evaluation, contract award and project administration (Windapo & Olukemi, 2017). Despite this regulatory structure, procurement outcomes remain largely unsatisfactory. Persistent challenges such as cost overruns, delays, frequent variations, rework and quality deficiencies are widespread (Olusanya, 2018; Oyewobi et al., 2017). These inefficiencies are further exacerbated by institutional constraints including bureaucratic delays, weak enforcement mechanisms, limited adoption of digital tools, poor communication and unstable policy environments (Aswan, 2018; Babatunde & Ernest, 2017).

Recent empirical evidence highlights the severity of these challenges in Abuja. Although the 2024 Federal Budget allocated approximately ₦4.99 trillion to capital projects, implementation outcomes remained poor (Punch, 2024). A study of public building projects in Abuja reported average cost overruns exceeding 44% and completion rates below 60%, with extreme cases recording over 200% cost escalation (Ameh & Suleiman, 2024). National analyses also recorded more than ₦99 billion worth of abandoned or poorly executed projects between 2023 and 2024, underscoring systemic weaknesses in planning, procurement and professional oversight (ICIR, 2024; Intelpoint, 2025).

Given these realities, attention has increasingly shifted to the performance and characteristics of consultants entrusted with safeguarding value for money and ensuring procurement integrity. Decisions made by consultants at early design and procurement stages may influence up to 80% of total project costs (Windapo & Olukemi, 2017). However, consultant performance outcomes remain inconsistent, partly due to weak selection criteria, prioritisation of low fees over competence, and the absence of standardised evaluation mechanisms (Festus, 2021; Obeoirien, 2019).

Against this backdrop, this study examines the characteristics of consultants involved in the procurement of public construction projects in Abuja, Nigeria. By identifying and prioritising these characteristics from the perspectives of multiple stakeholders, the study seeks to provide empirical evidence to inform the development of a context-

specific and theory-driven consultant performance evaluation framework.

2. Literature Review

2.1. Public Construction Procurement and Consultancy Practice

Public procurement systems are designed to ensure transparency, accountability and value for money in the utilisation of public resources. In construction, procurement processes are inherently complex due to technical uncertainty, multiple stakeholders and long project durations (Uyerra et al., 2014). Consultants serve as professional agents who guide clients through this complexity by translating policy objectives into technical solutions and contractual arrangements.

In developing economies, however, the effectiveness of consultants is often constrained by institutional and governance challenges. Studies in Nigeria reveal that consultants' recommendations are frequently overridden by administrative or political considerations, particularly during contractor selection and contract award stages (Ogunlana, 2020; Babatunde et al., 2022). This undermines professional judgement and contributes to suboptimal project outcomes.

2.2. Consultant Selection and Performance Challenges

The procurement of consultancy services differs fundamentally from the procurement of works or goods. Consultancy outcomes are knowledge-intensive and difficult to standardise, making quality-based selection critical (Daoud et al., 2018). International best practice advocates Quality and Cost-Based Selection (QCBS), where technical competence is prioritised over price (World Bank, 2016). In Nigeria, however, fee-driven selection remains prevalent, leading to the engagement of underqualified consultants and subsequent performance failures (Festus, 2021).

Empirical studies identify misrepresentation of qualifications, engagement of unregistered consultants, weak supervision and ethical lapses as recurring problems (Kim & Lee, 2019; Ogbu & Omogiate, 2020). These issues reflect broader deficiencies in consultant evaluation practices, which are often subjective, fragmented and overly focused on deliverables rather than professional processes and behaviours (Aliu et al., 2020).

2.3. Characteristics of Effective Construction Consultants

The literature identifies a wide range of characteristics associated with effective consultancy practice. Technical expertise remains foundational, encompassing knowledge of construction methods, materials, digital tools and regulatory requirements (Nawi et al., 2020). Experience in public sector projects is also critical due to the unique procedural and accountability demands of public procurement (Eom et al., 2015).

Beyond technical competence, behavioural and managerial attributes such as communication, leadership, problem-solving and ethical integrity significantly influence consultant effectiveness (Chong et al., 2020; Damayanti, 2022). Financial acumen and risk management capabilities are particularly important in public projects characterised by budgetary constraints and high scrutiny (Flyvbjerg et al., 2003).

Recent studies emphasise the growing importance of sustainability knowledge and digital literacy, including proficiency in BIM, e-procurement systems and data analytics (Lee et al., 2022; World Bank, 2023). However, evidence from Nigeria suggests that many consultants lag behind in these areas, limiting innovation and efficiency (Tunji-Olayeni et al., 2023).

2.4. Research Gap

Although previous studies have examined consultant performance in general terms, limited empirical research has focused specifically on the characteristics required for effective consultancy in Nigeria's public construction procurement context. Moreover, few studies integrate quantitative stakeholder assessments with qualitative insights to capture the multidimensional nature of consultancy practice. This study addresses this gap by systematically examining consultant characteristics within Abuja's public procurement environment.

3. Methodology

3.1. Research Design

The study adopted a mixed-methods research design using a convergent parallel approach. Quantitative and qualitative data were collected concurrently and integrated during interpretation to provide a comprehensive understanding of consultant characteristics.

3.2. Population, Sample and Sampling Technique

The study population comprised stakeholders involved in public construction projects in Abuja, including consultants, contractors, project managers, procurement officers and government officials. Snowball sampling was employed due to the absence of a comprehensive sampling frame. A total of 391 valid questionnaire responses were obtained, exceeding the minimum sample size of 384. Semi-structured interviews were conducted with 8 professional stakeholders.

3.3. Data Collection Instruments

Quantitative data were collected using a structured questionnaire containing Likert-scale items measuring the importance of consultant characteristics. A pilot study involving 48 respondents confirmed instrument clarity and reliability. Qualitative data were collected through semi-structured interviews exploring perceptions of consultant suitability and performance.

3.4. Validity and Reliability

Reliability was assessed using Cronbach's alpha, with values ranging from 0.950 to 0.990, indicating excellent internal consistency. Validity was enhanced through triangulation, pilot testing and the use of established analytical techniques.

3.5. Data Analysis

Descriptive statistics (mean scores and standard deviations) were used to rank consultant characteristics. Inferential analysis employed the Kruskal-Wallis test to examine variations across stakeholder roles. Qualitative data were analysed thematically and integrated with quantitative findings.

4. Findings and Results

4.1. Characteristics of Consultants in Public Construction Procurement

Respondents assessed a range of consultancy attributes using a five-point Likert scale ranging from slightly important (1) to extremely important (5). As presented in Table 1, the findings demonstrate a clear prioritisation of consultant characteristics among procurement stakeholders in Abuja. Technical expertise in construction emerged as the most critical attribute (Mean = 4.62), reflecting the technical complexity and regulatory demands of public construction projects. This was closely followed by resourcefulness (Mean = 4.54) and strong project

management skills (Mean = 4.53), highlighting the importance of adaptability and effective coordination in navigating procurement processes. Collectively, these results underscore the dominance of technical and managerial competencies in shaping professional expectations of consultants within Nigeria’s public construction procurement environment.

Overall, respondents emphasised a broad blend of technical, managerial and interpersonal competencies. While experience in public sector projects and cultural competence ranked lower, they remained positively rated.

Table 1. Characteristics of Consultants in Public Construction Procurement

Characteristics of Consultants	Mean	Ranking	Std. Deviation
Technical expertise in construction	4.62	1	0.680
Actively Resourceful	4.54	2	0.732
Strong project management skills	4.53	3	0.738
Active listening skills	4.49	4	0.786
Self Confidence	4.49	5	0.770
Ability to communicate effectively	4.47	6	0.706
Financial acumen	4.39	7	0.761
Strong negotiation skills	4.35	8	0.774
Ability to work under pressure	4.33	9	0.753
Professional integrity and ethics	4.30	10	0.745
Risk management skills	4.29	11	0.723
Commitment to timeliness	4.28	12	0.724
Commitment to quality assurance	4.28	13	0.786
Capability for innovative solutions	4.27	14	0.760
Proven track record of success	4.25	15	0.718
Attention to detail	4.23	16	0.662
Strong analytical skills	4.23	17	0.704
Problem solving skills	4.23	18	0.649
Ability to conduct effective research	4.23	19	0.765
Team leadership capability	4.22	20	0.716
Understanding of procurement process	4.21	21	0.692
Networking and relationship building	4.21	22	0.756
Adaptability to changing circumstances	4.20	23	0.725
Knowledge of sustainable practices	4.20	24	0.765
Interpersonal skills	4.19	25	0.757
Technical proficiency with construction tools	4.19	26	0.711
Flexibility in response to client needs	4.18	27	0.739
Capacity for stakeholder engagement	4.16	28	0.725
Client centric approach	4.15	29	0.740
Availability for on-going support	4.13	30	0.853
Experience in public sector projects	3.89	31	0.752
Understanding of local regulations	3.88	32	0.775
Cultural competence	3.66	33	0.990

4.2. Hypothesis Testing

The Kruskal–Wallis test was conducted to examine whether significant differences exist in stakeholder perceptions of consultant characteristics across stakeholder roles in public construction procurement. As presented in Table 2, the test produced a Kruskal–Wallis H value of 10.822 with 4 degrees of freedom and an asymptotic significance value of 0.029. Since the p-value is less than the 0.05 significance threshold, the null hypothesis is rejected. This result indicates a statistically significant variation in how different stakeholder groups prioritise consultant characteristics within the procurement process. The finding suggests that stakeholder expectations of consultants are role-specific, reflecting the diverse responsibilities and interests of actors involved in public construction procurement.

Table 2. Kruskal–Wallis Test for Differences in Consultant Characteristics across Stakeholder Roles

Test Statistics ^{a,b}	
Kruskal-Wallis H	10.822
Df	4
Asymp. Sig.	.029
a. Kruskal Wallis Test	
b. Grouping Variable: Stakeholder roles in Procurement	

4.3. Qualitative Findings

Insights from stakeholder interviews, as illustrated in Figure 1, provide a nuanced understanding of the characteristics expected of consultants involved in public construction procurement in Abuja. Cross-case analysis revealed nine interrelated themes that collectively shape consultants’ capacity to manage procurement complexity, deliver quality outcomes and uphold transparency and accountability. The findings indicate that consultant suitability is anchored in verifiable professional credentials, technical competence and strict regulatory compliance. Participants consistently identified formal accreditation and licensure as fundamental “gatekeepers of credibility”, supported by substantial professional experience. These credentials must be complemented by strong technical expertise in areas such as cost estimation, tender documentation and contract administration to ensure effective participation in public-sector procurement processes.

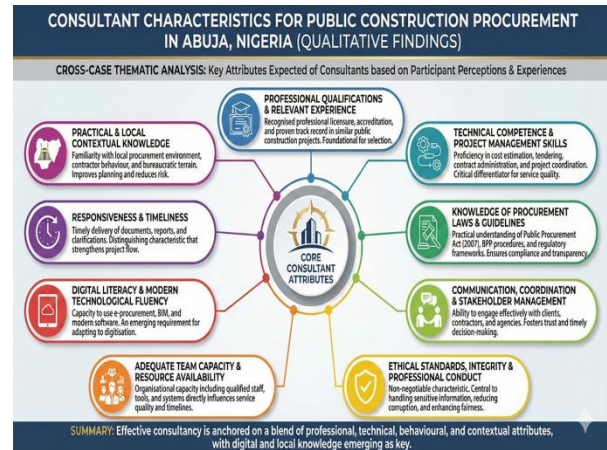


Figure 1: Consultant Characteristics for Public Construction Procurement in Abuja, Nigeria (Interview Analysis): A Cross-Case Thematic Analysis of Key Attributes

4.4. Triangulation of Findings

Triangulation confirms strong alignment between quantitative and qualitative findings. Both data strands emphasise technical expertise, project management capability, ethical conduct and communication as foundational consultant characteristics, while highlighting emerging requirements such as digital literacy and contextual knowledge.

5. Discussion

The findings demonstrate that consultant effectiveness in Abuja’s public construction procurement environment is driven primarily by technical competence, managerial capability and interpersonal effectiveness. These attributes reflect the complex operational, regulatory and relational demands of public projects, consistent with Lam (2020) and Aduwo et al. (2020).

The statistically significant variation across stakeholder roles underscores the contextual nature of consultant performance expectations. Project managers and consultants prioritise technical precision and coordination, while procurement officers emphasise compliance and transparency. Contractors focus on negotiation and responsiveness, reflecting execution realities. These differentiated expectations support calls for role-sensitive performance evaluation frameworks (Mukaddas et al., 2022).

Qualitative insights further reveal gaps in digital capability and the growing importance of ethical leadership. Although digital literacy is not yet uniformly prioritised, evidence suggests it will soon become a

mandatory requirement for effective consultancy practice in Nigeria.

6. Conclusion

This study examined the characteristics of consultants involved in the procurement of public construction projects in Abuja, Nigeria. The findings demonstrate that effective consultancy is inherently multidimensional, requiring a balanced combination of technical expertise, managerial competence, communication skills and ethical integrity. Stakeholder perceptions vary significantly according to role, highlighting the need for differentiated evaluation criteria.

The study concludes that the absence of a standardised, context-sensitive consultant evaluation framework undermines accountability and procurement effectiveness. It recommends the development of a comprehensive performance evaluation system aligned with BPP regulations, incorporating technical, behavioural, ethical and digital competencies. Such a framework would enhance consultant accountability, improve value for money and contribute to more sustainable public construction outcomes in Nigeria.

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