

Practice Based Capability on Financial Management and Cash Flow Forecasting Adoption among Quantity Surveyors in Nigeria

Mohammed Lawal Yahaya^{1*}, Adewumi Joseph Babalola², Danlami Ebenezer Salla¹ and Muhammad Laminu Ibrahim³

¹Quantity Surveying, Faculty of Earth and Environmental Sciences, Bayero University, Kano, Kano State, Nigeria.

²Quantity Surveying, Faculty of Environmental Sciences, University of Lagos, Lagos State, Nigeria.

³Faculty of Transportation Management, Federal University of Transportation, Daura (FUTD).

*mlyahaya.qsv@buk.edu.ng (Corresponding Author)

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ABSTRACT

Purpose: Quantity surveyors are responsible for effective financial project appraisal throughout the project lifecycle. However, despite their significance, financial management practices being adopted by quantity surveyors in Nigeria often deviate from theoretical principles and focus more on specific patterns. This creates inconsistencies between planned and actual project outcomes, which threaten successful project delivery in Nigeria. The aim of the study is to evaluate the processes of financial management and cash flow forecasting practiced by quantity surveyors in the delivery of construction projects in Nigeria.

Methods: The study adopted a quantitative research method with a total population of 89 registered quantity surveyors. A proportionate stratified sampling technique was used based on a sample size of 72 within the study area. A questionnaire was distributed as a means of data collection, and 42 questionnaires were retrieved, resulting in a response rate of 58.33%.

Findings: The results revealed that the majority of quantity surveyors practice financial claims aspects, with about 81.14%, and budgeting and auditing at 17.50%, while planning and controlling are at less than 2%. Eigenvalues, $\lambda_{\max} = 9.39$, obtained from the pairwise comparison matrix are 9.39, and the consistency ratio is $3.56\% > 10\%$, an acceptable factor, indicating consistency among quantity surveyors in the selection of the most practiced area in financial management.

Implications: that areas such as planning and controlling, budgeting, and auditing are not given much attention in practice by most quantity surveyors assessed.

Originality: the need for improvement in financial management practices among quantity surveyors to enhance project performance delivery and align with best practices.



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1. Introduction

Financial management (FM) plays a crucial role in efficient allocation, monitoring, and control of limited resources throughout the project lifecycle. Cash flow forecasting (CF) acts as a valuable complement to FM by predicting the timing and sufficiency of financial inflows and outflows, essential for maintaining liquidity and fulfilling obligations to stakeholders such as contractors, suppliers, and labourers (Mohammadi, 2024; Abbasov, 2021). Inadequate financial planning and imprecise cash flow projections can result in a cascade of issues, including delayed payments, strained relationships between clients and contractors, and compromised project quality.

Quantity Surveyors (Qs) are central figures in the effective implementation of FM and CF tools to achieve

project objectives. Their responsibilities encompass cost estimation, budgeting, cash flow monitoring, and financial reporting throughout the construction project's lifecycle. Despite their pivotal role, studies indicate that the adoption of CF and FM practices by Qs in Nigeria often diverges from theoretical frameworks and global best practices (Oladimeji & Aina, 2021; Olanrewaju, 2016). Challenges faced by many Nigerian Qs in integrating modern financial forecasting tools result in discrepancies between planned and actual project outcomes (Ebekozi & Aigbavboa, 2024; Owusu-Manu, 2014). These challenges may stem from outdated methodologies, inadequate training in digital tools, delays linked to clients, and macroeconomic uncertainties (Wolmarans, 2015), underscoring a significant disparity in the application of CF and FM across various projects.

Brook (2004) highlighted that the conventional approach to FM and CF forecasting often neglects technological advancements, leading to disparities between projected and realised financial results. The NIQS 2020 Report emphasises that quantity surveyors nationwide grapple with practical hurdles in effectively implementing FM and CF forecasting despite rigorous academic and professional education. This struggle could be attributed to limited access to contemporary forecasting and financial tools or a failure to adeptly apply these tools due to organisational inertia or insufficient comprehensive training. Such discrepancies contribute to recurrent challenges like cost escalations, project delays, and financial irregularities in construction projects. Consequently, there is an urgent need to bridge the gap between theoretical knowledge and practical implementation of FM and CF forecasting by QSs in Nigeria.

This study aims to assess the FM and CF processes employed by quantity surveyors in executing construction projects in Nigeria, with a focus on pinpointing key areas requiring enhancement in professional practice within the construction industry. Additionally, the study seeks to provide practical insights into the factors contributing to project abandonment and cost and time overruns in numerous projects and to showcase the competence and efficacy of QSs in project financial management.

2. Literature Review

Various research studies have delved into the realms of financial management (FM) and cash flow forecasting (CFF), specifically within the Nigerian construction sector. Farounbi *et al.* (2020) and Rafiat and Henry (2026) revealed that a considerable number of Nigerian Small and Medium-Scale Enterprise (SMEs) still adhere to traditional financial management methodologies characterized by manual data recording and rudimentary spreadsheet analyses, leading to operational inefficiencies and inaccuracies. Their investigation unveiled that these conventional approaches often result in cost overruns and project delays primarily due to deficient monitoring and reporting frameworks.

Similarly, Sa'eed *et al.* (2020) scrutinized the financial control mechanisms employed by Quantity Surveyor (QS) firms. Their findings demonstrated that while QS professionals actively engage in activities like cost planning, valuations, and financial reporting, there exists a gap between theoretical knowledge and its practical implementation. Their study affirmed that outdated forecasting tools and limited access to digital resources impede the precision of cash flow projections (Aghimien *et al.*, 2021).

Le and Cong (2023), alongside Strauss and Quinn (2022), explored the impact of digital finance on professional

efficacy within organizational settings. Their research highlighted the persistent impediments faced by finance professionals stemming from inadequate integration of contemporary financial management technologies, resulting in delays in information dissemination, strategic decision-making, forecasting, and risk mitigation. Moreover, their investigations underscored the advantages of organizational digital transformation, such as enhanced financial reporting accuracy, improved budgeting processes, strengthened internal controls, and informed decision-making.

Tajuddin (2025) and Hassania Rahou *et al.* (2025) contended that merely adopting digital systems is insufficient for progress, emphasizing the necessity for sophisticated digital tools and competencies capable of navigating intricate financial landscapes. They argued that organizations failing to invest in cutting-edge financial technologies encounter challenges in establishing effective financial control systems and decision-making frameworks, potentially leading to diminished operational efficiency and weakened financial management efficacy.

Homayoun *et al.* (2024) and Lestari *et al.* (2022) identified that enterprises displaying limited uptake of financial technologies are more susceptible to adverse effects of inflation and exchange rate fluctuations due to the absence of advanced analytical instruments for forecasting and scenario analyses. Consequently, inadequate digitalization coupled with macroeconomic instability significantly undermines the proficiency of financial management practitioners and the financial performance of organizations.

Furthermore, Alu *et al.* (2024) assessed the impact of project cost control on the financial performance of the Nigerian construction industry. Their study pinpointed weak cash flow forecasting practices as a primary contributor to project abandonment and delays. The authors advocated for closer alignment between QS training institutions, technological advancements, and industry requisites to bridge the theory-practice gap effectively.

2.1. Conceptual Framework of Financial Management in Construction Projects

Financial management (FM) in the context of construction pertains to the methodical procedure of strategizing, coordinating, supervising, and regulating the financial assets of a project to attain predetermined goals while adhering to cost, time, and quality limitations. It covers a broad spectrum of tasks, including but not limited to budgeting, financial strategizing, cost management, auditing, investment evaluation, and cash flow supervision. Within the construction sector, FM assumes a pivotal role in ensuring the efficient utilization of project resources and the sustained financial viability of projects over their lifespan (Njeri *et al.*, 2020; Alu *et al.*, 2024).

The ambit of FM in construction transcends mere financial record-keeping or accounting; it entails making strategic choices to optimize the utilization of scarce resources. As posited by Alu *et al.* (2024), methodologies guarantee the appropriate allocation of funds to diverse project undertakings, monitor expenditures vis-à-vis budgets, and implement corrective measures when discrepancies emerge. This approach aids in mitigating the risks associated with cost overruns, delayed payments, and

insolvency, prevalent in construction endeavors, particularly in developing nations.

Sound FM practices bolster project sustainability by aligning expenses with available funding and projecting future financial needs to forestall liquidity crises. Moreover, FM fosters transparency and answerability, fundamental in settings where challenges like corruption, mismanagement, and inefficacy frequently jeopardize the successful execution of projects (Kavishe & Chileshe, 2019).

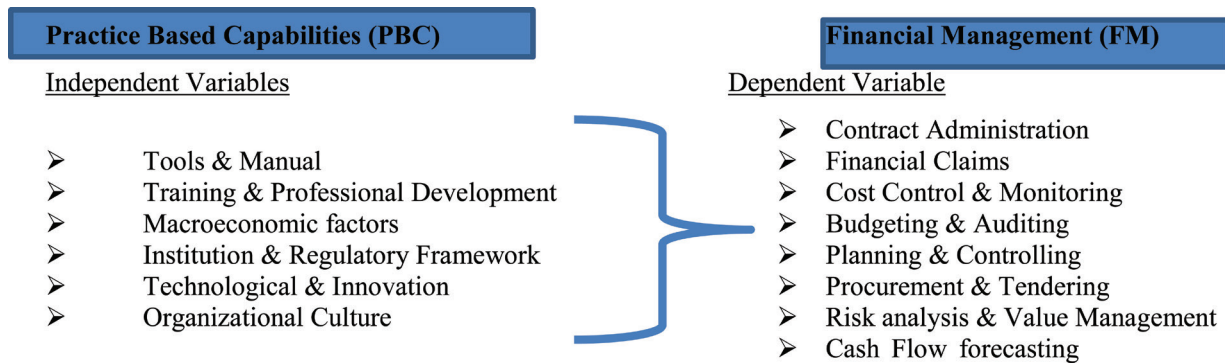


Figure 1: Conceptual Framework for Practice Based Capability on Financial Management

The diagram in Figure 1 illustrates that various exogenous factors such as tools and manual training and professional development, macroeconomic factors, institutional and regulatory frameworks, technological and innovation, and organizational culture exert a substantial influence on financial performance metrics encompassing cash flow forecasting (CFF), budgeting and auditing, planning and control, procurement and tendering, risk analysis and value management, cost control and monitoring, and financial claims within an organizational context. Precise cash flow predictions, efficient planning oversight, and comprehensive earned value and variance scrutiny play pivotal roles in cost management, ensuring timely project finalization and enriching financial disclosures. These practices contribute to heightened profitability, enhanced asset utilization, and reinforced liquidity, consequently elevating project objectives and overall financial robustness of the institution (Figure 1).

2.2. Conceptual Framework of Cash Flow Forecasting in Construction Projects

Cash flow forecasting (CFF) within the realm of construction pertains to the anticipation of both the timing and magnitude of monetary inflows and outflows across the duration of a project. This practice enables the various stakeholders involved in a project-to-project funding requirement to synchronize expenditures with available financial reserves

and uphold financial liquidity during the execution phase (Cui *et al.*, 2010). Diverging from conventional accounting methodologies that predominantly analyze historical financial transactions, CFF is forward-looking in nature, aiding enterprises in pre-emptively identifying potential deficits or surpluses prior to their materialization (Akintoye & Fitzgerald, 1999; Ojo & Odediran, 2015).

Research by Zayed & Liu (2014) has underscored that inadequate cash flow forecasting stands as a prominent catalyst for contractor insolvency and project abandonment within developing economies. A meticulously developed forecast guarantees the timely disbursement of payments to subcontractors, suppliers, and laborers, thereby buttressing the smooth progression of projects. Nevertheless, within the Nigerian context, there is a constrained adoption of sophisticated forecasting mechanisms such as Earned Value Management (EVM) and digital project management software. A multitude of organizations persists in relying on manual approaches and antiquated cost data, which may engender unreliability (Emmanuel & Ali, 2022). This prevailing situation curtails the capacity of quantity surveyors and project managers to generate precise forecasts, thereby imperiling projects to financial jeopardy. Evidently, the practice of cash flow forecasting assumes a pivotal role in upholding financial solvency.

Chadee *et al.* (2023) and Omotayo *et al.*, (2022) have observed that the implementation of effective CFF protocols culminates in the punctual remittance of

payments to contractors and suppliers, thereby diminishing conflicts and fostering trust between clients and contractors. Conversely, deficient forecasting methodologies can trigger payment delays, strain relationships, and even culminate in project abandonment. It is apparent that cash flow forecasting transcends beyond its financial control function, emerging as a strategic management instrument. When adeptly harnessed by quantity surveyors, this practice enhances decision-making processes, bolsters cost-effective project delivery, and fortifies the financial sustainability of construction endeavors.

2.3. Cost Planning and Budgeting

Quantity Surveyors (QSs) play a crucial role in formulating comprehensive cost plans and initial estimations during the project's inception phase. Their primary objective is to ensure that the project's design is in harmony with the financial objectives of the client and to offer insights on financial limitations. Leveraging their expertise, QSs ascertain feasible financial targets by taking into account prevailing market conditions, inflation forecasts, and the availability of resources (Ogunsemi & Jagboro, 2006). Adafin *et al.*, (2020) emphasized that the cost planning activities executed by QSs have effectively supported numerous clients in mitigating scope creep and budget excesses through the early identification of financial vulnerabilities.

2.4. Financial Reporting and Cost Control

One fundamental duty of Quantity Surveyors (QSs) involves upholding financial control during project implementation. QSs are tasked with generating interim valuations, overseeing expenses in comparison to the budget, and delivering periodic financial statements to apprise the client of the financial status (Seeley, 1997; Ross & Williams, 2013). As highlighted by Oke and Aigbavboa (2017), QSs within the Nigerian construction sector serve as financial overseers, overseeing the financial repercussions of alterations in design and project delays.

2.5. Cash Flow Forecasting and Monitoring

Quantity surveyors play a crucial role as cost managers and financial experts within the construction sector, offering valuable contributions in addressing a variety of industry challenges (Nnadi *et al.*, 2024; Cartlidge, 2023). These challenges encompass reliable cash flow forecasting, cost planning, interim valuation, cost reconciliation, dispute resolution, and financial monitoring. Hence, underscoring the essential involvement of quantity surveyors across all project phases is imperative, given its capacity to enhance project performance, mitigate financial mismanagement, and reduce

project failure rates, which are increasingly prevalent within the industry (Chandramohan *et al.*, 2022; Adafini *et al.*, 2020).

Research by Nazarov and Agayeva (2026) highlighted that inadequate cash flow management and delayed payments represent significant factors impacting the successful completion of construction projects in developing economies, such as Nigeria. These findings underscore how cash flow deficiencies often result in disruptions to material procurement, delays in labor payments, and overall project execution setbacks, among other challenges.

2.6. Risk Analysis and Value Management

Contemporary quantity surveyors play a crucial role in identifying potential financial liabilities and applying value management strategies to mitigate superfluous expenditures while ensuring high standards. This process serves to optimize the ultimate worth of projects and ensures that financial outlays are congruent with the client's aims (Ibim & Dimkpa, 2025).

2.7. Professional Expectations vs. Actual Practices in Nigeria

While globally, the role of Quantity Surveyors (QSs) in Facility Management (FM) and Capital Facilities Financing (CFF) is widely recognized, empirical findings indicate a discrepancy between theoretical frameworks and practical applications in Nigeria. The Nigerian Institute of Quantity Surveyors (NIQS) mandates the comprehensive involvement of QSs in all financial aspects of projects; however, in actuality, their engagement is at times restricted due to clients' preferences for architects or engineers in matters concerning costs (Ogunsemi & Jagboro, 2006). Additionally, deficiencies in comprehensive training regarding sophisticated financial modeling and software utilization have further hindered their ability to provide precise projections (Muritala *et al.*, 2024). Various elements contribute to this disparity, including underutilization in strategic planning, reluctance towards technological assimilation, and organizational and political impediments, as well as deficiencies in capacity and training.

2.8. Challenges in Financial Management and Cash Flow Forecasting

The implementation of financial management (FM) and cash flow forecasting (CFF) in construction is impeded by various challenges in Nigeria and similar developing economies, stemming from institutional deficiencies, technological disparities, macroeconomic volatility, and constraints in professional conduct, despite the acknowledged significance of these practices.

2.8.1. Outdated Tools and Manual Processes

In Nigeria, a significant impediment to effective forecasting lies in the persistent utilization of antiquated tools and manual methodologies. A substantial number of Quantity Surveying (QS) enterprises within the nation continue to rely on rudimentary spreadsheets and manual techniques for their forecasting endeavors (Sa'eed *et al.*, 2020). Despite the cost efficiency associated with these tools, they exhibit limitations in their capacity to capture the intricate nuances of projects, consequently yielding imprecise prognostications. Conversely, scholarly research conducted internationally has underscored the benefits linked to the adoption of digital solutions such as Building Information Modelling (BIM), enterprise resource planning (ERP) systems, and simulation models, facilitating dynamic and precise forecasting outcomes (Mohanraj & Balaji, 2026; Junussova, 2022). The sluggish pace of digital integration in Nigeria is fostering a widening gap between global benchmarks and indigenous industry conventions.

2.8.2. Lack of Training and Professional Development

Insufficient training and a lack of ongoing professional development pose a significant challenge for Quantity Surveyors (QSs). Research by Sa'eed *et al.* (2020) indicates that numerous practitioners in Nigeria lack exposure to advanced forecasting models and software tools, thereby relying heavily on conventional methods. The construction sector in Nigeria has also faced criticism for its scant investment in professional development initiatives (Isang *et al.*, 2026). This dearth of updated competencies hinders QSs from effectively applying their theoretical knowledge in practical contexts. Consequently, their efficacy in Financial Management (FM) and Cash Flow Forecasting (CFF) is compromised, ultimately undermining the competitive edge of Nigerian enterprises vis-à-vis their global counterparts.

2.9. Theory–Practice Gap in Quantity Surveyors' Application

An enduring subject of inquiry within construction studies pertains to the disparity between the theoretical instruction received by Quantity Surveyors (QSs) and the practical application thereof within the industry. This disjunction, commonly referred to as the “theory-practice gap,” significantly influences financial management (FM) and cash flow forecasting (CFF) practices, thereby constraining the profession's capacity to optimize project results.

2.10. Consequences of the Gap

The theory-practice gap exerts considerable ramifications on project implementation within the Nigerian context.

These implications encompass diminished predictive precision, compromised professional esteem, restricted ingenuity, and adverse effects on project achievements. The erosion of forecasting accuracy emanates from the reliance on antiquated methodologies, culminating in frequent budget overruns and financial solvency predicaments. Forecasts routinely disregard market volatilities and ambiguities, thereby jeopardizing project financial viability. The incapacity of Quantity Surveyors (QSs) to deploy contemporary methodologies undermines their credibility, particularly in contrast to their international counterparts. Enterprises unable to operationalize sophisticated theories stagnate, impeding global competitiveness within the sector. This dearth of innovation impedes progress and evolution. Inadequate financial oversight and flawed liquidity projections contribute to project delays, desertions, and conflicts, ultimately deleteriously impacting project outcomes.

3. Research Method

3.1. Research Design

The investigation employed quantitative methodologies to elicit responses from individuals with the aim of delving into the research domain. A survey instrument was selected for this investigation on the premise that professionals' convictions, perspectives, conceptions, opinions, and reflections concerning the topic could be readily ascertained through a survey instrument (Kasim *et al.*, 2013). The quantitative methodology was considered the most suitable for accomplishing the research objective and amassing data (Fellows & Liu, 2021; Leedy, 1997; Saunders *et al.*, 2012; Zikmund, 1997). Moreover, the efficacy of the quantitative methodology for this study was discerned from the research inquiry employed and the extent of emphasis on contemporary rather than historical occurrences (Yin, 2003). Additionally, the scarcity of empirical investigations appraising factors contributing to project abandonment within the industry underscores the necessity for such studies.

3.2. Population and Sampling Design

This research focused on a target group of 89 registered quantity surveyors affiliated with the NIQS chapters in Sokoto and Kebbi states. A sample size of 72 was chosen using a proportionate stratified random sampling approach based on the Yamane sampling frame methodology. Employing this sampling technique aimed to ensure equitable, proportional, and impartial representation of participants within the research area.

3.3. Data Instrument

The data collection instrument was a structured questionnaire that included 4 items in section A and 9 items in section B, designed to address the research questions and structured on AHP pairwise comparisons. Seventy-two questionnaires were distributed to respondents, with 42 questionnaires returned, resulting in a response rate of 58.33%.

3.4. Data Analysis

The Analytical Hierarchy Process (AHP) technique was utilized to evaluate the ratings of the respondents to establish a representative or mean rating point for each stakeholder. AHP (Saaty, 2000) was employed to assess how well each respondent scored for each qualitative criterion. The application of the AHP is based on the fact that it aids decision-making time and its advantages over other methods, as well as its wide application in various areas (Ozyurek & Erdal, 2018).

A pairwise comparison matrix was created for each criterion using a scale of strong agreement. Judgments were entered using the fundamental scale of the AHP (San Cristobal, 2012). Assuming n attributes, the pairwise comparison of attribute i with attribute j results in a square matrix $A_{n \times n}$ where a_{ij} indicates the comparative importance of attribute i relative to attribute j . In the matrix, $a_{ij} = 1$ when $i = j$, and $a_{ji} = 1/a_{ij}$.

Table 1: Values of Random Index

n	2	3	4	5	6	7	8	9	10
RI	0	0.58	0.90	1.12	1.24	1.32	1.41	1.45	1.51

4. Results

4.1. Assessment of Alternative Financial Management Practices Adopted by Quantity Surveyors

Table 2: Group Paired Comparison Matrix with Respect to Financial Management Practice by QS's

	Financial Claims (FC)	Planning and Control (PC)	Budgeting and Auditing (BA)	Priority Vector (Normalized Principal Eigen Vector)	$\lambda_{\max}$ Eigenvalue	CI (Consistency Index)	CR = CI/RI	Ranking based on Priority Vector
FC	1	42	42	81.14%				1
PC	0.02	1	0.03	1.18%				3
BA	0.02	40	1	17.58%	9.39	3.20	3.56% < 10%	2

Note: $\lambda_{\max} = 9.39$, $CI = 3.20$, $CR = 3.56\% < 10\%$ (Acceptable)

The vector

$$W = [W_1, W_2 \dots W_n] \quad (1)$$

Which indicates the weight that each criterion is given in the pairwise comparison matrix A needs to be known. The compute AWT , where A is the pairwise comparison matrix, and superscript T denotes transpose.

Find out the maximum eigenvalue

$$\lambda_{\max} = (1/n) \sum_{i=1}^n [(AW)_i / W_i] \quad (2)$$

Compute the consistency index (CI) as follows:

$$CI = (\lambda_{\max} - n) / (n - 1) \quad (3)$$

The smaller the CI, the closer the consistency. If the CI is small enough, the decision-maker's comparisons are likely consistent, providing useful estimates for their objectives. Next, compare the consistency index with the random index for the appropriate value of n in decision-making. If $(CI/RI) < 0.10$, the consistency level is acceptable. However, if $(CI/RI) > 0.10$, significant inconsistencies may be present and the AHP results may not be meaningful. Table 1 below shows the random index generated by Saaty (2000) and San Cristobal (2012) for comparison in AHP analysis.

Table 3: Overall Comparison Matrix Assessment of Alternative Financial Management Practice by QS's

	Financial Claims			Planning and Control			Budgeting and Auditing			Eigen Vector, Value and Consistence Ratio (CI/RI)		
	AFMP1	AFMP5	AFMP8	AFMP2	AFMP7	AFMP3	AFMP4	AFMP6	AFMP9	Priority Vector (%)	CR= CI/RI	$\lambda_{\max}$ Eigenvalue
AFMP1	1.00	0.07	0.07	13.00	1.00	13.00	0.07	1.00	0.07	4.0%	0.72	17.38
AFMP5	15.00	1.00	1.00	15.00	15.00	15.00	15.00	15.00	1.00	25.7%		
AFMP8	15.00	1.00	1.00	15.00	15.00	15.00	15.00	15.00	1.00	24.8%		
AFMP2	0.08	0.07	0.07	1.00	0.08	1.00	0.07	0.08	0.07	0.9%		
AFMP7	1.00	0.07	0.07	13.00	1.00	13.00	0.07	1.00	0.07	4.0%		
AFMP3	0.08	0.07	0.07	1.00	0.08	1.00	0.07	0.08	0.07	0.9%		
AFMP4	14.00	0.07	0.07	14.00	14.00	14.00	1.00	14.00	0.07	11.5%		
AFMP6	1.00	0.07	0.07	13.00	1.00	13.00	0.07	1.00	0.07	4.0%		
AFMP9	15.00	1	1.00	15.00	15.00	15.00	15.00	15.00	1.00	24.8%		

Note: $\lambda_{\max}$ = 17.38, CI= 1.05, CR = 7.2% < 10% (Acceptable); (AFMP = Assessment Financial Management Practice by QS)

5. Discussion

The outcomes of the comparative matrix analysis for the three distinct groups utilized to evaluate the financial management practices of quantity surveyors are depicted in Table 2. The priority vector derived from the matrix delineates the proportional weights assigned to the various facets under scrutiny. Specifically, the financial claims aspect is accorded a weight of 81.14%, while planning and control receive a weight of 1.18%, and budgeting and auditing are allocated a weight of 17.58%. These results underscore the predominant emphasis placed by quantity surveyors on financial claims within their operational domain, encompassing managerial functions, cost supervision, auditing, and investment assessment. Notably, budgeting and auditing are subsumed within the broader ambit of financial management, as elucidated in certain definitions (Ofori *et al.*, 2025). With planning and control registering the lowest weight of less than 2%, it is apparent that financial management undertakings, as practiced by Group One, exhibit a prevalence approximately five times greater than

that of budgeting and auditing among quantity surveyors in the study area. Moreover, financial claims are approximately 70 times more frequently practiced compared to planning and control by a majority of quantity surveyors.

In addition, Table 2 reveals an eigenvalue of 9.39 and a consistency ratio of 3.56, falling below the acceptable threshold of 10% (Saaty, 2000; San Cristobal, 2012), indicative of a commendable level of coherence in the evaluative judgments rendered by the participants. Furthermore, these outcomes suggest that quantity surveyors display a commendable level of uniformity in their subjective evaluations concerning financial management, thereby fostering effective and sustainable financial outcomes across the project lifecycle when adopting financial management practices (Alu *et al.*, 2024; Njeri *et al.*, 2020).

Moving on to Table 3, it delineates the viewpoints of the respondents regarding the most judicious and applicable alternatives adopted from the three groups within the purview of financial management practices. Notably, AFMP5 (assessment of risk costs stemming from fluctuations) garners primacy with an eigenvector of 25.7%,

securing the top rank in the assessment, while AFMP8 and AFMP9 (integration of technology, market trends, and external economic factors in financial planning processes) command a weight of 24.8% and are positioned second. Conversely, alternatives falling under the rubric of planning and control are relegated to the lowest ranks, garnering less than 5% (comprising cash flow forecasting, review, and software utilization in cash flow management). These findings underscore the proclivity of quantity surveyors in the study area towards the frequent practice of financial claims, budgeting, and auditing vis-à-vis planning and control.

Furthermore, the eigenvalue computed from Table 3 is recorded at 17.38, with a consistency ratio of 7.2%, both figures falling below the stipulated threshold of 10% for the comprehensive composite weight of the alternatives (Saaty, 2000; San Cristobal, 2012). This underscores the robust consistency in the evaluative judgments put forth by the respondents, thereby corroborating the findings in Table 2 and underscoring the unanimity in the subjective assessments rendered without deviation among them.

The results corroborate prior research by Oladapo and Onifade (2018) and Muritala *et al.* (2024), emphasizing the pivotal role of consistent financial planning, integrated cost control, risk assessment, and innovative financial management in projects to ensure profitability, sustainability, and goal achievement. Moreover, the accentuation on budget variance analysis and financial auditing underscores the cognizance of quantity surveyors regarding accountability and control mechanisms across diverse project categories, aligning with the current study's findings that prioritize financial claims as foremost and budgeting and auditing as secondary factors necessitating attention by quantity surveyors in their financial management practices to actualize project objectives and ensure sustainability, an area requiring further development among quantity surveyors in Nigeria presently.

6. Implications of the Study

6.1. Theoretical Implications

The professional landscape in Nigeria has encountered numerous obstacles hindering advancements in both formal and informal sectors. Despite endeavors encompassing capacity enhancement, training, workshops, and legislative structures by governmental and private entities to rectify these deficiencies, discrepancies and hurdles persist in the operational strategies of professional organizations. Consequently, there is a pressing necessity to adopt globally recognized standards of financial management comprehensively.

6.2. Practical Implications

Quantity surveyors in Nigeria play a crucial role in ensuring cost-effectiveness and efficient project execution. However, there is a noted deficiency in their proactive engagement and effectiveness. While some have integrated financial claims methodologies, such as leveraging advanced technologies and risk evaluations for cost variances, essential aspects like project planning, monitoring, financial control, budgeting, and auditing are often overlooked. This neglect contributes to instances of budget and time overruns, project abandonment, and inefficient resource allocation, posing significant challenges to project sustainability, transparency, and accountability in Nigeria. Nevertheless, these challenges are not insurmountable. Enhancing the operational efficacy of the construction sector and the quality of quantity surveying services in Nigeria necessitates a comprehensive adoption of financial management strategies and cutting-edge technologies. Augmenting expertise through capacity-building initiatives is imperative to facilitate the uptake of contemporary financial management practices, fostering robust monitoring and evaluation mechanisms.

7. Limitations and Future Scope

A significant drawback of this research lies in its confinement to solely geographical limitations, small sample size, nonresponse bias, and self-reported data, thereby restricting its generalizability. Nevertheless, valuable insights can be gleaned from the congruent evaluation perspectives of all participants, advocating for subsequent inquiries for congruence. Prospective investigations in the realm of quantity surveying in Nigeria ought to leverage the insights provided by this study to enrich the scholarly domain in this area. The research underscores the necessity for amelioration in financial management methodologies among quantity surveyors to elevate the efficacy of project execution. It is recommended that the Nigerian Institute of Quantity Surveyors and industry professionals embrace global benchmarks in financial management and construction fiscal practices.

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Authorship Contribution

Mohammed Lawal Yahaya: Conceptualization, methodology, and writing - original draft preparation.

Adewumi Joseph Babalola: Writing - review and editing, and supervision.

Muhammad Laminu Ibrahim: Funding acquisition.

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Ethical Approval

The study was conducted in accordance with applicable ethical principles for research involving human participants. Participation was voluntary, and informed consent was obtained from all respondents before data collection. Respondents were informed about the purpose of the study and their right to participate voluntarily. The confidentiality of their responses was maintained throughout the study.

Declarations

The authors confirm that this manuscript is original, has not been published previously, and is not under consideration for publication elsewhere. All sources of information have been properly acknowledged, and appropriate ethical research standards have been followed.

Data Availability Statement

The data supporting the findings of this study are available from the corresponding author (Yahaya, M.L.) upon reasonable request. The data are not publicly available due to privacy and confidentiality considerations concerning the participants.

Human and Animal Rights

All applicable ethical principles concerning research involving human participants were followed throughout the study, and informed consent was obtained from all respondents. The study did not involve animals; therefore, no ethical approval or informed consent related to animal research was required.

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AI Disclosure Statement

The authors used artificial intelligence (AI)-based tools solely for language improvement and proofreading. AI tools were not used to generate research data, conduct statistical analyses, or make research-related decisions. The authors take full responsibility for the content, accuracy, interpretation, and conclusions of the manuscript.

References

- Abbasov, S. (2021). Improving cash flow management. *Economic Herald of Donbas*, 4(66), 33–38.
- Adafin, J., Rotimi, J. O., & Wilkinson, S. (2020). Risk impact assessments in project budget development: Quantity surveyors' perspectives. *International Journal of Construction Management*, 20(1), 13–28. <https://doi.org/10.1080/15623599.2018.1462441>
- Aghimien, D., Aigbavboa, C., Oke, A., & Thwala, W. (2021). *Construction digitalisation: A capability maturity model for construction organisations*. Routledge. <https://doi.org/10.1080/014461900370799>
- Akintoye, A., & Fitzgerald, E. (2000). A survey of current cost estimating practices in the UK. *Construction Management & Economics*, 18(2), 161–172.
- Alu, A. J., Muritala, T. A., Ogedengbe, F. A., Gambo, N., & Nwoye, M. I. (2024). Impact of project cost control on the financial performance of the Nigerian construction industry: A qualitative approach. *Open Journal of Business and Management*, 12(4), 2812–2823. <https://doi.org/10.4236/ojbm.2024.124145>
- Brook, M. (2004). *Estimating and tendering for construction work* (pp. 85–99). Elsevier Butterworth-Heinemann.
- Chadee, A., Ali, H., Gallage, S., & Rathnayake, U. (2023). Modelling the implications of delayed payments on contractors' cashflows on infrastructure projects.

- Chandramohan, A., Perera, B. A. K. S., & Dewagoda, K. G. (2022). Diversification of professional quantity surveyors' roles in the construction industry: The skills and competencies required. *International Journal of Construction Management*, 22(7), 1374–1381. <https://doi.org/10.1080/15623599.2020.1720058>
- Cui, Q., Hastak, M., & Halpin, D. (2010). Systems analysis of project cash flow management strategies. *Construction Management and Economics*, 28(4), 361–376. <https://doi.org/10.1080/01446191003702484>
- Ebekozien, A., & Aigbavboa, C. O. (2024). Improving quantity surveying education through continually updating curriculum digitalisation to meet industry requirements. *Journal of Engineering, Design and Technology*, 22(5), 1523–1543. <https://doi.org/10.1108/JEDT-01-2022-0043>
- Emmanuel, J. A., & Ali, B. I. (2022). Critical organisational factors affecting the accuracy of conceptual cost estimates in an era of big data. *Journal of Contemporary Research in the Built Environment*, 6(1), 56–71. <https://doi.org/10.13140/RG.2.2.32938.08643>
- Farounbi, B. O., Ibrahim, A. K., & Abdulsalam, R. (2020). Advanced financial modeling techniques for small and medium-scale enterprises. *International Journal of Multidisciplinary Research and Growth Evaluation*, 1(3), 125–132. <https://doi.org/10.54660/IJMRGE.2020.1.3.125-132>
- Fellows, R. F., & Liu, A. M. (2021). *Research methods for construction*. John Wiley & Sons.
- Hassania Rahou, E., El Assfour, A., Hajjaj, M., Allammari, Y., & Jaride, C. (2025). Navigating the digital frontier key challenges and success factors for entrepreneurs in the age of technology. In *Obstacles Facing Hydrogen Green Systems and Green Energy* (pp. 263–282). IGI Global Scientific Publishing. <https://doi.org/10.4018/979-8-3693-8980-5.ch016>
- Homayoun, S., Pazhoi, M., & Manzarzadeh Tamam, H. (2024). The effect of innovation and information technology on financial resilience. *Sustainability*, 16(11), 4493. <https://doi.org/10.3390/su16114493>
- Ibim, A. A., & Dimkpa, K. (2025). Nigerian construction industry reforms and private sector involvement: X-raying cost engineering roles in sustainable infrastructure procurement. *Journal of Evrimata: Engineering and Physics*, 14–23. <https://doi.org/10.70822/journalofevrmata.v3i01.71>
- Isang, I. W., Ebiloma, D. O., & Ukpog, E. (2026). Stakeholders' engagement for advancing a sustainable Nigerian construction industry: A sustainable development goal-driven approach. *Smart and Sustainable Built Environment*, 15(6), 2571–2595. <https://doi.org/10.1108/SASBE-08-2024-0283>
- Junussova, T., Nadeem, A., Kim, J. R., Azhar, S., Khalfan, M., & Kashyap, M. (2022). Sustainable construction through resource planning systems incorporation into building information modelling. *Buildings*, 12(10), 1761. <https://doi.org/10.3390/buildings12101761>
- Kavishe, N., & Chileshe, N. (2019). Critical success factors in public-private partnerships (PPPs) on affordable housing schemes delivery in Tanzania: A qualitative study. *Journal of Facilities Management*, 17(2), 188–207. <https://doi.org/10.1108/JFM-05-2018-0033>
- Le, H. T. T., & Cong, T. D. (2023). BIM-integrated system: A successful alternative for estimating cash flow in building projects. *ASEAN Engineering Journal*, 13(4), 103–112. <https://doi.org/10.11113/aej.v13.19476>
- Leedy, P. D. (1997). *Practical research: Planning and design* (4th ed.). MacMillan, New York.
- Lestari, E. D., Hamid, N. A., Rizkalla, N., Purnamaningsih, P., & Urus, S. B. T. (2022). The effect of financial literacy, cost of technology adoption, technology perceived usefulness, and government support on MSMEs' business resilience. *Global Journal of Business Social Sciences Review (GATR-GJBSSR)*, 10(3), 132.
- Mohammadi, A. (2024). Dynamic cash flow management under uncertainty: Integrating scenario planning and advanced analytical tools. *International Journal of Applied Research in Management, Economics and Accounting*, 2(1), 23–34. <https://doi.org/10.63053/ijmea.32>
- Mohanraj, R., & Balaji, S. N. (2026). Digital twin technology: A comprehensive review of modeling, applications, challenges and future directions in complex system integration. *Archives of Computational Methods in Engineering*, 33(3), 3291–3316. <https://doi.org/10.1007/s11831-025-10397-3>
- Nazarov, V., & Agayeva, N. R. (2026). Modern mechanisms of improving financial management in construction enterprises. *Scientific Bulletin No. 1*. <https://doi.org/10.54414/pzwo6339>
- Njeri M. N. Muhoho J., & Kiarie J. (2020). Financial management practices and financial performance of construction companies in Nairobi County. *International Journal of Research and Innovation in Social Science*, 4(8), 85–95. <https://rsisinternational.org/journals/ijriss/Digital-Library/volume-4-issue-8/665-670.pdf>
- Nnadi, E. O. E., Obiechefu, G. C., & Egwuagu, O. M. (2024). Quantifying compliance: Quantity surveyors as guardians of public funds in construction projects: A comprehensive review. *Elite Journal of Scientific Research and Review*, 2(1), 1–12.
- Ofori, J. N. A., Agyekum, A. K., Khalfan, M. M. A., Botchway, B., & Antwi-Afari, P. (2025). Enabling

- circular construction: Barriers to zero waste in the Ghanaian construction industry. *International Journal of Building Pathology and Adaptation*, 1–23.
<https://doi.org/10.1108/IJBPA-02-2025-0038>
- Ogunsemi, D. R., & Jagboro, G. O. (2006). Time-cost model for building projects in Nigeria. *Construction Management and Economics*, 24(3), 253–258.
<https://doi.org/10.1080/01446190500521041>
- Ojo, G. K., & Odediran, S. J. (2015). Significance of construction cost estimating risks in Nigeria. *International Journal of Civil Engineering and Construction Science*, 2(1), 1–8.
- Oke, A. E., & Aigbavboa, C. O. (2017). *Sustainable value management for construction projects*.
- Oladimeji, O., & Aina, O. O. (2021). Cash flow management techniques practices of local firms in Nigeria. *International Journal of Construction Management*, 21(4), 395–403.
<https://doi.org/10.1080/15623599.2018.1541705>
- Olanrewaju, A. (2016). Measuring the service gaps in the roles of quantity surveyors in the emerging market. *Benchmarking: An International Journal*, 23(5), 1111–1131.
- Omotayo, T. S., Kulatunga, U., & Awuzie, B. (2022). *Continuous cost improvement in construction: Theory and practice*. Routledge.
- Owusu-Manu, D. G., Edwards, D. J., Holt, G. D., & Prince, C. (2014). Industry and higher education integration: A focus on quantity surveying practice. *Industry and Higher Education*, 28(1), 27–37.
<https://doi.org/10.5367/ihe.2014.0188>
- Ozyurek, İ., & Erdal, M. (2018). Assessment of qualification criteria described in public procurement law code 4734 in construction works by analytic hierarchy process (AHP). *Gazi University Journal of Science*, 31(2), 437–454.
- Rafiat A.-A. A., & Henry, A. (2026). Financial management practices and financial performance of small and medium enterprises in Ekiti State, Nigeria. *International Journal of Research and Innovation in Social Science*, 10(3), 822–839.
<https://doi.org/10.47772/IJRISS.2026.100300056>
- Ross, A., & Williams, P. (2013). *Financial management in construction contracting*. John Wiley & Sons.
- Saaty, T. I. (2000). *Fundamental of decision making and priority theory with AHP*. RWS Publications, Pittsburgh.
- Sa'eed, A., Gambo, N., Inuwa, I. I., & Musonda, I. (2020). Effects of financial management practices on technical performance of building contractors in northeast Nigeria. *Journal of Financial Management of Property and Construction*, 25(2), 201–223.
<https://doi.org/10.1108/JFMPC-07-2019-0064>
- San Cristobal, J. R. (2012). Contractor selection using multicriteria decision-making methods. *Journal of Construction Engineering and Management*, 138(6), 751–758. [https://doi.org/10.1061/\(ASCE\)CO.1943-7862.0000488](https://doi.org/10.1061/(ASCE)CO.1943-7862.0000488)
- Saunders, M., Lewis, P., Thornhill, A., & Lewis, P. (2012). *Research methods for business students*.
- Seeley, I. H. (1997). Quantity surveying organisation and practice. In *Quantity surveying practice* (pp. 399–437). Macmillan Education UK.
https://doi.org/10.1007/978-1-349-14402-0_15
- Strauss, E., & Quinn, M. (2022). Introduction to handbook of accounting information systems. In *The Routledge handbook of accounting information systems* (pp. 1–5). Routledge.
- Tajuddin, I. (2025). Challenges of new technology adoption in improving company growth and competitiveness. *Advances in Economics & Financial Studies*, 3(1), 56–70.
<https://doi.org/10.60079/aefts.v3i1.458>
- Wolmarans, H. (2015). Financial management practices in successful small and medium enterprises (SMEs). *The Southern African Journal of Entrepreneurship and Small Business Management*.
- Yin, R. K. (2003). *Applications of case study research* (Vol. 34). Sage.
- Zayed, T., & Liu, Y. (2014). Cash flow modeling for construction projects. *Engineering, Construction and Architectural Management*, 21(2), 170–189.
<https://doi.org/10.1108/ECAM-08-2012-0082>
- Zikmund, W. G. (1997). *Business research methods* (4th ed.). The Dryden Press, New York. https://openlibrary.org/books/OL1022514M/Business_research_methods