

Assessment of The Working Conditions of Quantity Surveyors in Construction Management Practice in Minna, Nigeria

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Abstract- This study assessed the working conditions of quantity surveyors in construction management practice in Minna, Nigeria. The study was motivated by the need to understand how workplace conditions influence professional performance in the construction industry. A descriptive survey research design was adopted, and data were collected from quantity surveyors using a structured questionnaire. The data obtained were analyzed using mean score and Relative Importance Index (RII) to determine the significance of variables. Findings revealed that quantity surveyors operate under challenging working conditions characterized by high workload intensity, limited access to modern tools, inadequate remuneration, and insufficient training opportunities. The study further established that economic instability, poor project planning systems, weak institutional support, and limited technological adoption are major factors affecting working conditions. In addition, the results showed that poor working conditions negatively affect accuracy in cost estimation, job satisfaction, and productivity in construction project delivery. The study concludes that improving the working conditions of quantity surveyors is essential for enhancing professional efficiency and construction project performance. It recommends the provision of modern working tools, strengthening of professional development programs, and improved institutional and policy support to enhance productivity and job satisfaction among quantity surveyors in Minna, Nigeria.

Keywords: *Quantity Surveyors, Working Conditions, Construction Management, Job Satisfaction, Nigeria*

I. INTRODUCTION

Quantity surveyors are essential professionals in the construction industry, playing a central role in cost planning, cost control, procurement management, contract administration, and ensuring value for money in construction projects. Their expertise

directly influences project cost performance, financial accountability, and overall construction efficiency. In modern construction management practice, the effectiveness of quantity surveyors is not only dependent on their technical competence but also on the quality of their working conditions (Oke, Aigbavboa, & Thwala, 2021).

The construction industry in developing countries such as Nigeria is increasingly characterized by complexity, uncertainty, and economic instability. Issues such as inflation, fluctuating material prices, exchange rate volatility, and project financing constraints continue to affect project delivery outcomes. These challenges place additional pressure on construction professionals, particularly quantity surveyors, who are required to produce accurate cost estimates and maintain effective financial control under highly unstable conditions (Ejiofor & Nnadi, 2025). As a result, their working environment has become a critical factor influencing their performance and professional effectiveness.

Working conditions in construction practice refer to the physical, organizational, and professional environment in which quantity surveyors perform their duties. These include access to modern cost management tools, workload intensity, remuneration structure, job security, availability of training and continuous professional development, as well as institutional and managerial support. According to Aigbavboa, Oke, and Thwala (2022), improved working conditions significantly enhance productivity, job satisfaction, and decision-making efficiency among construction professionals.

In Nigeria, the construction industry continues to experience rapid expansion driven by infrastructural

development, urbanization, and population growth. Cities such as Minna are witnessing increased construction activities in both public and private sectors, thereby increasing the demand for quantity surveying services. However, despite this growing demand, many quantity surveyors operate under challenging conditions, including inadequate access to digital tools, limited professional development opportunities, and high workload pressures. These constraints may negatively affect the accuracy and efficiency of cost management processes in construction projects (Aghimien et al., 2021). Empirical evidence suggests that poor working conditions have a direct impact on professional performance in the construction industry. Studies have shown that inadequate tools, poor organizational support, and excessive workload contribute to reduced productivity and increased error rates in cost estimation and project control activities (Oke et al., 2021). Similarly, Aghimien et al. (2020) emphasized that limited access to modern technologies and weak institutional support systems are major barriers affecting the performance of construction professionals in developing economies.

Furthermore, job satisfaction has been identified as a key determinant of performance among construction professionals. Aigbavboa et al. (2022) noted that professionals who operate in supportive environments with adequate resources and career development opportunities tend to demonstrate higher efficiency and commitment to project delivery. Conversely, unfavorable working conditions often lead to stress, reduced motivation, and declining professional output.

Despite the critical role of quantity surveyors in construction management, there is still limited empirical research focusing specifically on their working conditions in Minna, Nigeria. Most existing studies tend to examine construction professionals broadly, without isolating the unique experiences and challenges faced by quantity surveyors. This creates a knowledge gap in understanding how their working environment influences their effectiveness in cost management and construction project delivery. Therefore, this study assesses the working conditions of quantity surveyors in construction management practice in Minna, Nigeria. It seeks to identify the

key factors influencing their working environment and provide evidence-based recommendations aimed at improving professional efficiency, job satisfaction, and overall construction project performance.

II. STATEMENT OF THE PROBLEM

Despite the critical role of quantity surveyors in ensuring effective cost planning, cost control, and financial management in construction projects, there is growing concern about the adequacy of their working conditions in Nigeria. The construction industry is increasingly characterized by economic instability, inflation, fluctuating material prices, and rising project complexity, all of which place significant pressure on quantity surveyors to deliver accurate cost information under challenging circumstances. Studies have shown that poor working environments, including inadequate tools, excessive workload, and limited organizational support, negatively affect the performance and productivity of construction professionals (Aigbavboa et al., 2022; Oke et al., 2021). However, despite the importance of quantity surveyors to construction management practice, there is limited empirical evidence focusing specifically on their working conditions, particularly in emerging urban areas such as Minna, Nigeria. Existing studies tend to address construction professionals in general without isolating the unique challenges faced by quantity surveyors in practice. This creates a knowledge gap in understanding how their working environment influences their effectiveness in cost management and project delivery. Therefore, the problem addressed in this study is the insufficient empirical assessment of the working conditions of quantity surveyors in Minna and how these conditions affect their professional performance in construction management practice.

III. OBJECTIVE OF THE STUDY

1. Examine the working conditions of quantity surveyors in construction management practice in Minna, Nigeria.
2. Identify the factors affecting the working conditions of quantity surveyors in the study area.
3. Assess the effects of working conditions on the performance of quantity surveyors in construction project delivery.

4. Determine the challenges faced by quantity surveyors in their working environment within construction practice in Minna.

IV. LITERATURE REVIEW

Working Conditions of Quantity Surveyors

Working conditions refer to the physical, organizational, and professional environment in which employees perform their duties. In the context of quantity surveying practice, working conditions include workload intensity, availability of digital tools, remuneration, job security, professional support, and access to training opportunities. These factors collectively influence productivity, efficiency, and job satisfaction among construction professionals. Recent studies have emphasized that the effectiveness of quantity surveyors is strongly influenced by their working environment, particularly in developing countries where institutional and technological support is often limited. Aigbavboa et al. (2022) noted that improved working conditions significantly enhance the performance and productivity of construction professionals by enabling better decision-making and efficiency in project delivery.

Role of Quantity Surveyors in Construction Management Practice

Quantity surveyors play a central role in construction management by providing cost advice, preparing bills of quantities, managing project budgets, and ensuring financial control throughout the project lifecycle. Their responsibilities are critical in ensuring that construction projects are completed within budget and deliver value for money. Oke et al. (2021) emphasized that quantity surveyors are key financial managers in construction projects, and their competence directly affects cost performance and project success. Similarly, recent literature highlights that their role has expanded beyond traditional cost estimation to include risk management, procurement strategy, and value optimization, especially with the increasing complexity of construction projects (Aghimien et al., 2021).

Factors Influencing Working Conditions of Quantity Surveyors

The working conditions of quantity surveyors are influenced by several interrelated factors. One of the most significant factors is workload intensity, as construction professionals are often required to handle multiple projects simultaneously under strict deadlines. This can lead to stress, reduced efficiency, and errors in cost management. Another key factor is access to modern tools and technologies such as cost management software and Building Information Modeling (BIM). Studies have shown that limited access to digital tools negatively affects productivity and efficiency in construction cost management (Aghimien et al., 2020). In addition, remuneration, job security, and organizational support also play a significant role in determining job satisfaction and performance among quantity surveyors. Furthermore, training and continuous professional development are essential for maintaining competence in modern construction practices. Aigbavboa et al. (2022) observed that professionals who receive regular training and institutional support are more likely to adapt to evolving industry demands and perform effectively.

Job Satisfaction and Performance of Quantity Surveyors

Job satisfaction is a key determinant of performance in construction practice. It reflects how content professionals are with their job roles, working environment, remuneration, and career development opportunities. In quantity surveying practice, job satisfaction has been linked to improved accuracy, productivity, and commitment to professional duties. Research indicates that quantity surveyors in developing countries often experience moderate to low job satisfaction due to poor remuneration structures, limited promotion opportunities, and high workload demands (Oke et al., 2021). Similarly, Aghimien et al. (2021) found that inadequate working conditions and lack of organizational support negatively affect job satisfaction and retention among construction professionals.

Challenges Affecting Working Conditions in Construction Practice

Several challenges negatively affect the working conditions of quantity surveyors in Nigeria. Economic instability, inflation, and fluctuating material prices create uncertainty in cost planning

and increase professional pressure. These conditions often force quantity surveyors to work under tight budgets and unrealistic expectations. In addition, limited adoption of digital technologies remains a major challenge. Although tools such as BIM and advanced cost management systems have been shown to improve efficiency, their adoption in Nigeria is still low due to lack of training and infrastructure (Aghimien et al., 2020). Other challenges include poor organizational structures, inadequate staffing, and limited opportunities for career advancement. Similarly, Aigbavboa et al. (2022) reported that supportive organizational environments, adequate tools, and professional development opportunities are critical for improving job satisfaction and performance. Aghimien et al. (2021) further emphasized that digital transformation and institutional support play a key role in enhancing the effectiveness of construction professionals.

V. METHODOLOGY

This study adopted a descriptive survey research design to assess the working conditions of quantity surveyors in construction management practice in Minna, Nigeria. The design was considered appropriate because it allows for the collection of quantitative data from respondents without manipulating variables, thereby ensuring an objective assessment of real-life professional conditions. The study area is Minna, Niger State, Nigeria, where construction activities are increasing due to ongoing infrastructural and urban development. The target population consisted of 120 practicing quantity surveyors, drawn from consulting firms, construction companies, and public sector organizations within the study area. These professionals were selected because they are directly involved in cost planning and construction financial management and are therefore well positioned to provide reliable information on working conditions. A stratified random sampling technique was used to ensure proportional representation across different practice settings. The population was divided into three strata: consulting firms, contracting firms, and public institutions. From the total population of 120 quantity surveyors, a sample size of 92 respondents was determined and selected proportionately from each stratum to ensure fairness and reduce sampling bias.

Data were collected using a structured questionnaire developed from relevant literature. The instrument was divided into sections covering demographic information, working conditions, job satisfaction, and challenges affecting professional practice. Respondents were required to rate items using a Likert scale. The instrument was validated by experts in construction management and quantity surveying to ensure clarity and relevance. Reliability was established using Cronbach's alpha coefficient, confirming internal consistency of the instrument. Data collection was carried out through both physical distribution and online administration of questionnaires to improve response rate and accessibility. The collected data were analyzed using descriptive statistics, including mean score (MS) and Relative Importance Index (RII), to determine and rank the factors influencing the working conditions of quantity surveyors in the study area.

VI. RESULTS AND DISCUSSION

Response Rate of Respondents

Table 1: Response Rate of Respondents

Category of Respondents	Number Distributed	Number Retrieved	Percentage (%)
Quantity Surveyors	92	78	84.8
Total	92	78	84.8

Table 1 shows that out of the 92 questionnaires distributed, 78 were successfully retrieved, representing a response rate of 84.8%. This response rate is considered high and adequate for statistical analysis in survey-based construction management research. The high return rate indicates strong willingness of quantity surveyors in Minna to participate in the study, which enhances the reliability and validity of the findings.

Working Conditions of Quantity Surveyors

Table 2: Working Conditions of Quantity Surveyors in Minna

Working Condition Indicators	Mean Score (MS)	RII	Rank
High workload intensity	4.45	0.89	1st
Lack of modern software/tools	4.32	0.86	2nd

Inadequate remuneration	4.28	0.86	3rd
Limited training opportunities	4.20	0.84	4th
Poor organizational support	4.05	0.81	5th
Job insecurity	3.88	0.78	6th

The results in Table 2 indicate that quantity surveyors in Minna operate under pressured working conditions, with high workload intensity ranking as the most critical issue. This suggests that professionals are frequently assigned multiple projects simultaneously, which increases stress levels and reduces efficiency in cost management tasks. The second and third most significant issues are lack of modern tools and inadequate remuneration, indicating that many quantity surveyors still work without adequate digital support systems and are not sufficiently compensated relative to their workload. Limited training opportunities and poor organizational support further reflect weaknesses in institutional development structures. Overall, the findings suggest that the working conditions of quantity surveyors in Minna are moderately poor and may negatively affect professional performance.

Factors Affecting Working Conditions

Table 3: Factors Affecting Working Conditions

Factors	Mean Score (MS)	RII	Rank
Economic instability (inflation)	4.60	0.92	1st
Poor project management systems	4.38	0.88	2nd
Lack of institutional support	4.25	0.85	3rd
Limited access to technology	4.10	0.82	4th
Inadequate professional training	4.05	0.81	5th

Results in Table 3 reveal that economic instability is the most significant factor affecting working conditions, as inflation and fluctuating construction costs directly influence project planning and professional workload. Poor project management systems also significantly contribute, indicating inefficiencies in planning, coordination, and execution processes within the construction environment. In addition, lack of institutional support

and limited access to modern technology highlight systemic challenges affecting the profession. Inadequate training further compounds these issues, reducing the ability of quantity surveyors to adapt to modern construction demands. Overall, the results show that both macroeconomic and institutional factors strongly influence working conditions.

Effects of Working Conditions on Performance

Table 4: Effects of Working Conditions on Quantity Surveyor Performance

Effects on Performance	Mean Score (MS)	RII	Rank
Reduced accuracy in cost estimation	4.55	0.91	1st
Low job satisfaction	4.40	0.88	2nd
Decreased productivity	4.35	0.87	3rd
Delayed project delivery	4.10	0.82	4th
Increased professional stress	4.05	0.81	5th

The results in Table 4 show that poor working conditions significantly affect the accuracy of cost estimation, which ranked highest. This indicates that pressure, inadequate tools, and workload intensity reduce the precision of financial forecasting and cost control functions. Low job satisfaction and decreased productivity also emerged as major effects, showing that unfavorable working environments negatively influence motivation and efficiency. Delays in project delivery and increased stress levels further demonstrate that poor working conditions not only affect individuals but also impact overall project performance. These findings highlight a clear relationship between working environment quality and professional effectiveness.

Challenges in the Working Environment

Table 5: Challenges Facing Quantity Surveyors

Challenges	Mean Score (MS)	RII	Rank
Inflation and economic instability	4.70	0.94	1st
Poor project planning systems	4.38	0.88	2nd
Lack of professional development	4.25	0.85	3rd
Weak institutional support	4.10	0.82	4th
Limited use of modern technology	4.05	0.81	5th

Results in Table 5 shows that inflation and economic instability remain the most critical challenge affecting quantity surveyors, as fluctuating prices directly impact cost planning and project budgeting. Poor project planning systems further worsen the situation by creating inefficiencies in project execution. Additionally, lack of professional development and weak institutional support reduce the capacity of quantity surveyors to adapt to evolving industry demands. Limited use of modern technology also highlights the slow digital transformation of construction practice in the study area. The challenges identified are both economic and institutional in nature, significantly affecting professional performance.

VII. DISCUSSION OF FINDINGS

The findings of this study reveal that quantity surveyors in Minna operate under moderately poor working conditions, characterized by high workload intensity, limited access to modern tools, inadequate remuneration, and insufficient training opportunities. This aligns with contemporary construction management literature which emphasizes that poor working environments significantly reduce the efficiency and effectiveness of professionals in the built environment (Aigbavboa et al., 2022). The high workload identified in this study further reflects the increasing complexity of construction projects in developing economies, where professionals are often required to manage multiple projects simultaneously under constrained resources.

The study also established that economic instability, particularly inflation and fluctuating material prices, is the most significant factor affecting the working conditions of quantity surveyors. This finding is consistent with recent research which highlights that macroeconomic instability remains a major challenge in construction cost management, often leading to uncertainty in budgeting and increased professional pressure (Ejiofor & Nnadi, 2025). Similarly, Oke et al. (2021) noted that unstable economic conditions in developing countries place additional burden on construction professionals, especially quantity surveyors, who are responsible for ensuring cost accuracy and financial control.

Another key finding is the limited availability and adoption of modern construction technologies and tools, which negatively affects the working conditions and efficiency of quantity surveyors. This supports the observation by Aghimien et al. (2021) that digital transformation in the construction industry remains slow in many developing countries due to inadequate technical capacity, resistance to change, and weak institutional support. The absence of adequate digital tools such as cost management software reduces the ability of quantity surveyors to perform real-time cost monitoring and efficient project control.

The study further revealed that poor working conditions significantly affect the performance of quantity surveyors, particularly in terms of reduced accuracy in cost estimation, low job satisfaction, and decreased productivity. This finding is consistent with Aigbavboa et al. (2022), who reported that supportive working environments enhance professional performance, while unfavorable conditions lead to inefficiency and stress-related outcomes. Similarly, Oke et al. (2021) emphasized that job satisfaction is strongly linked to performance outcomes in construction practice, particularly in cost-sensitive roles such as quantity surveying.

In addition, the study identified weak institutional support, poor project planning systems, and limited professional development opportunities as key challenges affecting working conditions. These findings are consistent with Aghimien et al. (2020), who highlighted that inadequate institutional frameworks and limited capacity development are major barriers to effective construction management in developing economies. The lack of continuous professional development further limits the ability of quantity surveyors to adapt to evolving industry demands and emerging technologies.

VIII. CONCLUSION

This study assessed the working conditions of quantity surveyors in construction management practice in Minna, Nigeria. The findings revealed that quantity surveyors operate under challenging working conditions characterized by high workload

intensity, limited access to modern tools, inadequate remuneration, and insufficient professional development opportunities. These conditions indicate that although quantity surveyors remain central to construction cost management, their working environment is not fully supportive of optimal performance. The study further concludes that economic instability, poor project planning systems, weak institutional support, and limited technological adoption are major factors influencing working conditions and professional effectiveness. These challenges significantly affect job satisfaction, accuracy in cost estimation, productivity, and overall construction project delivery. Therefore, improving the working conditions of quantity surveyors is essential for enhancing efficiency, professional performance, and construction project outcomes in Minna.

IX. RECOMMENDATIONS

1. Construction organizations should provide adequate working tools, including modern cost management software and digital technologies, to enhance efficiency and accuracy in quantity surveying practice.
2. Regular training and continuous professional development programs should be implemented to improve the technical capacity of quantity surveyors and enable them to adapt to emerging construction technologies and practices.
3. Relevant professional bodies and government agencies should strengthen institutional frameworks by promoting better remuneration structures, improved project planning systems, and supportive policies that enhance the working conditions and overall performance of quantity surveyors.

REFERENCES

- [1] Aghimien, D. O., Aigbavboa, C., & Oke, A. (2021). Digital transformation and construction performance in developing countries. *Journal of Engineering, Design and Technology*.
- [2] Aghimien, D. O., Aigbavboa, C., Oke, A., & Thwala, W. (2020). Barriers to digital

transformation in the construction industry. *International Journal of Construction Management*.

- [3] Aigbavboa, C., Oke, A., & Thwala, W. (2022). Construction management practices and performance in developing countries. *Built Environment Project and Asset Management*.
- [4] Ejiofor, E. O., & Nnadi, J. N. (2025). Financial effects of cost estimation inaccuracy and material price volatility in Nigerian construction projects. *Smart Construction and Sustainable Cities*.
- [5] Oke, A. E., Aigbavboa, C., & Thwala, W. (2021). Sustainable construction practices and professional performance in the construction industry. *Sustainability*.