

## KEY PERFORMANCE INDICATORS OF NIGERIAN ARCHITECTS

**Kofoworola Pius OLAYENI (PhD)/ Adesina Adebayo AKINJOKUN (PhD)**

Department of Architecture,  
Obafemi Awolowo University

[kolayeni@oauife.edu.ng](mailto:kolayeni@oauife.edu.ng)

[aakinjokun@oauife.edu.ng](mailto:aakinjokun@oauife.edu.ng)

---

### **Abstract**

The activities of Nigerian architects are increasingly being scrutinised. Various interest groups are concerned with the architects' work and the end products of their work. Among such groups are the clients, employers of architects, other professionals in the construction industry, and the regulatory bodies. This study investigates what are perceived as key job performance indicators for architects as they discharge their professional duties in the Nigerian building/construction industry. A quantitative approach was adopted whereby architects in different parts of the country were sampled using well-structured questionnaires. The architects were to assess the job performance of Nigerian architects and highlight the key performance indicators for performance rating, commissioning, employment, and promotion. A total of four hundred and eight adequately filled questionnaires were used for the analysis. The results show that Nigerian architects' job performance was positively rated along the three dimensions of performance: contextual (69.1%), task (66%), and ethical performance (72%). Nine (9) variables were identified as key indicators of performance. These have the highest mean scores among the 57 variables considered.

**Keywords:** Nigerian architects, performance evaluation, performance indicators, profession, professionals

## **Introduction**

Recent research underscores that performance measurement enables organisations to obtain critical information necessary for benchmarking and continuous improvement. It facilitates the systematic evaluation of operational efficiency and effectiveness, supporting evidence-based decision-making across organisational tiers (Mio et al., 2022). Through performance assessment, areas requiring improvement are identified, ensuring that deficiencies are addressed proactively (Cunha et al., 2023). Moreover, performance measurement offers data essential for strategic decision-making, enhancing managerial insight and guiding organisational priorities (Mills et al., 2021).

The process aids leaders and policymakers in defining the direction and pace at which objectives should be pursued, fostering alignment between performance indicators and long-term strategic goals (Bristol-Alagbariya et al., 2022). More broadly, performance measurement delineates the parameters within which programmes, investments, and human resources contribute to desired outcomes. It serves as a reflective tool for professionals to assess their competencies, thus stimulating organisational learning and innovation (Frare et al., 2022).

Beyond retrospective analysis, performance measurement also supports foresight by setting measurable objectives for future growth and improvement (Fatorachian & Kazemi, 2023). It remains a mechanism for quantifying the efficiency and effectiveness of organisational actions, bridging past performance with future aspirations (Zulu et al., 2024).

Although the concept originated in the manufacturing sector, contemporary studies highlight its adoption within service and construction industries, where it has become integral to evaluating project delivery concerning time, cost, and quality (Ibrahim et al., 2022). Within the construction context, performance measurement now operates at three interrelated levels: the project, the organisation, and the stakeholder, each informing broader strategic improvement (Lam, 2022; Ikuabe et al., 2022).

In recent years, as the construction industry continues to grapple with the challenge of delivering high-quality and sustainable projects, performance measurement has emerged as a pivotal mechanism for evaluating and improving the quality of organisations, their projects, and the professionals who drive them (Olayeni, 2017). The consistent application of performance indicators ensures accountability, operational efficiency, and value creation across all project phases, thereby fostering a culture of continuous improvement and transparency (Aghimien et al., 2023). In this context, performance measurement frameworks have become indispensable for assessing not only the tangible outcomes of construction projects but also the professional competencies and collaborative efficiency of those involved in their delivery (Oke et al., 2023).

Despite its growing importance, contemporary research shows that stakeholder performance measurement remains an underexplored area, even though stakeholder effectiveness plays a decisive role in determining organisational success and project performance. Within this broader ecosystem, architects stand as crucial contributors to the construction process, with their design leadership and decision-making profoundly influencing project innovation, sustainability, and aesthetic value (Lawoyin, 2023). However, scholarly attention has tended to focus predominantly on project managers, contractors, and client satisfaction, often overlooking the centrality of architects in shaping holistic project outcomes (Lee et al., 2024). As the industry transitions towards more integrated and sustainability-driven practices, there is a growing recognition that the inclusion of architects in performance measurement frameworks is essential to achieving design excellence and strategic alignment in construction delivery (Zhou et al., 2022).

Recent studies have attempted to close this gap by investigating the multidimensional nature of stakeholder engagement and its implications for project and organisational success. For example, Adekunle et al. (2023) explored how collaborative performance frameworks can enhance architect-led design efficiency and stakeholder integration, while Lee et al. (2024) identified that neglecting

architect-centred metrics impedes the translation of design intent into measurable project performance. Similarly, Aghimien et al. (2023) emphasised that architects' competencies and communication behaviours serve as mediating factors linking design performance with overall construction productivity. These findings reinforce the call for holistic stakeholder performance systems that explicitly account for architects' strategic and creative roles in achieving sustainable outcomes. This study aims to look at performance indicators for architects in the Nigerian building/construction industry, with the aim that it can be used in assessing architects' performance in the industry.

### **Literature Review**

Performance is multifaceted, encompassing elements describing both the results and the processes creating the results (El Fallahi et al., 2023). In contemporary scholarship, performance is widely recognised as a multidimensional concept that encompasses behaviour, actions, and outcomes expressed in relation to specific goals or standards. Recent studies in architectural and construction management extend the behavioural interpretation of performance to include both process-oriented activities and their measurable outcomes, reinforcing the notion that performance is inherently dynamic and context-driven (Mughal et al., 2025). Performance thus reflects not merely the results achieved but also the intentional actions that contribute to those results, capturing the interaction between human agency, organisational systems, and environmental influences (Najafi et al., 2024).

Modern interpretations continue to align with earlier definitions of performance as an aggregation of actions and their effects over time, encompassing both efficiency (how resources are utilised) and effectiveness (the degree to which objectives are achieved). Within architectural and construction practice, performance embodies measurable progress towards design or project goals, reflecting both behavioural engagement and outcome realisation (Olawale, 2024; Ibrahim et al., 2024). This duality reinforces the position that performance cannot be understood as a static result alone but rather as an ongoing process of behaviour leading to observable achievement, evaluated against predefined benchmarks or success criteria (Faozen & Sandy, 2023).

Therefore, in architectural and construction contexts, performance signifies the integration of action, process, and result, where the quality of design decisions, managerial conduct, and executional precision collectively determine progress towards organisational and project objectives. It is, in essence, the manifestation of behaviour directed towards achieving measurable excellence in design, management, and construction delivery.

Borman and Motowidlo (1993) highlighted task performance and contextual performance, which is non-task performance. Later empirical refinements, such as those by Motowidlo and Kell (2012), further clarified the behavioural constructs of contextual performance and its predictive role in overall job effectiveness. Recent literature reinforces the distinction originally proposed by Borman and Motowidlo (1993), emphasising that while task performance relates directly to the technical delivery of design and construction outputs, contextual performance involves behavioural contributions such as collaboration, adaptability, and innovation that sustain organisational effectiveness. In the built environment disciplines, contextual performance is increasingly recognised as critical for achieving sustainable and integrated project outcomes (Aghimien & Aigbavboa, 2024).

Empirical findings indicate that contextual factors like communication, teamwork, and creative engagement strongly influence the quality of architectural design, client satisfaction, and project success. For instance, Xiong et al. (2024) linked contextual performance to collaborative efficiency in design-build projects, while Alkilani and Loosemore (2023) demonstrated that stakeholder-related behaviours mediate the relationship between professional competence and project performance. Similarly, Petrova and Kassem (2022) proposed a digital framework for evaluating contextual behaviours within BIM-enabled architectural environments, arguing that soft-skill-based performance is as vital as task proficiency in modern construction practice.

In contemporary organisational and design research, the differentiation between task and contextual performance remains a cornerstone in understanding professional effectiveness. Recent studies reaffirm the three fundamental assumptions first proposed by Borman and Motowidlo (1997) and Motowidlo and Schmit (1999). Firstly, task performance—comprising activities directly linked to the execution of technical or design duties—varies significantly across professional roles, while contextual performance, which reflects supportive and cooperative behaviours, tends to be relatively consistent across occupations (Abun et al., 2021; Hameed et al., 2023). Secondly, task performance is primarily influenced by ability-related factors, including technical competence, expertise, and experience. In contrast, contextual performance is more strongly associated with personality and motivational attributes, such as conscientiousness, initiative, and commitment (Otero et al., 2021). Finally, task performance represents prescribed, in-role behaviour, while contextual performance encompasses discretionary, extra-role actions that foster collaboration, organisational learning, and innovation (Borman & Motowidlo, 2021; Chaudhary & Panda, 2022).

Within the architecture and construction sectors, task performance embodies the technical and procedural efficiency through which professionals execute project-related activities that directly contribute to the organisational and design core. This includes the application of design knowledge, precision in documentation, and adherence to regulatory and quality standards. Conversely, contextual performance captures the behavioural and interpersonal dimensions such as teamwork, communication, and adaptive problem-solving that create a conducive environment for effective project delivery (Alkilani & Loosemore, 2022).

Current empirical evidence indicates that both performance dimensions are interdependent, with contextual behaviours often enhancing task proficiency by strengthening coordination and stakeholder relations. When aggregated over time, an individual's behavioural consistency and outcomes evaluated against organisational expectations constitute what is ultimately perceived as good or substandard performance (Huemann & Turner, 2024). In this sense, modern performance frameworks within design and construction management emphasise a holistic view of performance that integrates both technical execution and human-centred contributions (Kamau, 2024; Abejide, 2024).

In recent years, ethical performance has emerged as a vital dimension of performance measurement, particularly within the architecture, engineering, and construction (AEC) sectors. Contemporary scholarship underscores that ethics transcends abstract moral reasoning and manifests as a practical, measurable component of professional conduct. Ethical performance encompasses not only compliance with established professional codes but also the proactive integration of integrity, accountability, and social responsibility into daily decision-making (Shrestha, 2022). It represents a dynamic construct shaped by cultural, contextual, and temporal factors, reflecting evolving societal expectations and sustainability imperatives.

Ethics in professional practice is now viewed as an adaptive learning process, where behaviour is continuously evaluated against emerging norms of fairness, environmental stewardship, and equity. For architects and construction professionals, ethical performance extends beyond technical competence; it involves balancing professional judgment, client interests, and public welfare in an era of sustainability and digital transformation (Fraser et al., 2023).

In parallel, methods for measuring professional and organisational performance have evolved from traditional appraisal systems such as critical incident methods, behaviorally anchored rating scales (BARS), and 360-degree performance evaluations to include multidimensional ethical indices and behavioural analytics (Kuoribo, 2023). Within the AEC context, recent models integrate both hard and soft attributes: technical competence, innovation, and productivity on one hand, and ethical behaviour, collaboration, and transparency on the other. Studies demonstrate that integrating

ethical parameters into performance evaluation enhances trust, project outcomes, and overall organisational reputation (Mazzetto et al., 2024).

Empirical evidence also shows that predictive models of professional performance, particularly for architects and engineers, are increasingly incorporating ethical and sustainability considerations as performance predictors. This aligns with broader calls for responsible design and construction practices, where ethical awareness is a determinant of professional excellence and long-term industry resilience (Manu et al., 2021).

## Methodology

The study adopts the survey approach. Through a questionnaire survey design, the study was conducted among architectural firms in three Nigerian cities located in the west, east, and central Nigeria, namely Lagos, Enugu, and Abuja. Two of these cities, Lagos and Abuja, have the highest concentrations of architectural firms in Nigeria. Abuja 190 firms, Enugu 57 firms, and Lagos 289 firms (ARCON, 2013). One of every two architectural firms was selected, and two architects were purposively drawn from the selected firm for questionnaire administration. A total of 408 questionnaires were retrieved out of 536 administered, representing 76%. The respondents were asked to assess the job performance of architects in Nigeria in terms of task, contextual and ethical job performance. This module, adapted from literature (Borman & Motowidlo, 2009; Sonnentag & Frese, 2002), distributed architects' performance into three (3) dimensions, namely: Contextual Performance, Ethical Performance, and Task Performance. The respondents were to rate the performance of fellow architects along those three dimensions of performance and come out with a performance score.

The analysis involved the computation of the performance score of each architect. This means that each respondent architect's score of performance for Nigerian architects in general was used to determine the overall performance rating, and also along the 3 dimensions of contextual performance, task performance and ethical performance. There are 57 items in the questionnaire used to evaluate the performance of Nigerian architects. The first 22 items were used to evaluate architects' contextual performance. The following 12 items on the questionnaire were used to evaluate Nigerian architects' ethical performance, while the last 23 items were used to evaluate Nigerian architects' task performance.

## Main Discussions

**Table 1:** Demographic characteristics of respondents

| Dimensions of Profile                         | Frequency (n=408) | Percentage (%) |
|-----------------------------------------------|-------------------|----------------|
| <b>Gender</b>                                 |                   |                |
| Male                                          | 309               | 75.7           |
| Female                                        | 99                | 24.3           |
| <b>ARCON Registered</b>                       |                   |                |
| Yes                                           | 408               | 100            |
| No                                            | 0                 | 0.0            |
| <b>Education</b>                              |                   |                |
| HND                                           | 9                 | 2.2            |
| BSc.                                          | 10                | 2.5            |
| PGD                                           | 7                 | 1.7            |
| MSc.                                          | 353               | 86.5           |
| MPhil./PhD                                    | 29                | 7.1            |
| <b>Post Academic Qualification Experience</b> |                   |                |
| 36 - 45 years                                 | 1                 | 0.2            |
| 26 - 35years                                  | 39                | 9.6            |
| 16 - 25 years                                 | 130               | 31.9           |
| 6 - 15 years                                  | 213               | 52.2           |
| Less than 6 years                             | 25                | 6.1            |

| Firm location |     |      |
|---------------|-----|------|
| Abuja         | 143 | 35.0 |
| Enugu         | 31  | 7.60 |
| Lagos         | 234 | 57.4 |

From Table 1, the characteristics of the respondents are presented. A quarter of the overall respondents (408) are female architects, while male architects are in the majority. Most of the respondents (86.5%) have the Master of Science degree in Architecture. About 80% of the respondents have between 5 and 25 years of post-qualification experience, and about 10% of the architects have more than 25 years' experience. The respondents' architectural practices are located in Lagos (57.4%), Abuja (35.0%), and Enugu (7.6%).

## Contextual Performance

**Table 2:** Contextual Performance ratings

| Performance Level     | Grading Scores | Frequency n | Percent %    |
|-----------------------|----------------|-------------|--------------|
| Very Poor Performance | 24.0 – 41.2    | 37          | 9.1          |
| Poor Performance      | 41.3 – 58.4    | 38          | 9.3          |
| Average Performance   | 58.5 – 75.6    | 51          | 12.5         |
| Good Performance      | 75.7 – 92.8    | 208         | 51.0         |
| Very Good Performance | 92.9 – 110.0   | 74          | 18.1         |
|                       |                | <b>408</b>  | <b>100.0</b> |

The study found that the majority (69.1%) of the study participants considered Nigerian architects to be on the positive side of contextual job performance (Table 2). In comparison, 18.4% of the study participants considered Nigerian architects to be on the negative side of contextual performance, with about 13% of the study participants who adjudged Nigerian architects to be of average performance. Contextual performance deals with discretionary performances which do not contribute to the technical core (Krausert, 2009), and it supports the organisational, social, and psychological environment in which goals are pursued. This is strongly linked to the personality and motivation of the professional. The result, therefore, shows that the study participants considered Nigerian architects to be doing well in these areas, which helps the architectural firms achieve the set goals.

**Table 3:** Distribution of Respondents' agreement to indicators of Contextual Performance

| Variables of Contextual Performance                                                               | Mean Rank | SD  |
|---------------------------------------------------------------------------------------------------|-----------|-----|
| They pay close attention to important details in their work                                       | 3.7       | 1.2 |
| They strive to overcome obstacles that may hinder any task                                        | 3.7       | 1.2 |
| Nigerian architects have a good ability to listen to clients and other construction professionals | 3.7       | 1.2 |
| They can communicate amicably with superiors, clients, and other construction professionals       | 3.6       | 1.2 |
| They have respect for clients and other construction professionals                                | 3.6       | 1.2 |
| Nigerian architects perform their tasks speedily                                                  | 3.6       | 1.1 |
| They tackle challenging assignments enthusiastically                                              | 3.6       | 1.1 |
| They show good quality in cooperating with clients and other construction professionals           | 3.6       | 1.1 |
| They respect authority                                                                            | 3.6       | 1.1 |
| They anticipate problems with construction and take actions to prevent them                       | 3.5       | 1.1 |
| They conform to the organisation's standard procedures, values, and policies                      | 3.5       | 1.1 |
| They demonstrate civic virtues (good manners)                                                     | 3.5       | 1.1 |
| They make suggestions regarding organisational improvement                                        | 3.5       | 1.0 |
| They show consideration for the needs and feelings of others                                      | 3.5       | 1.0 |
| They are open to criticism                                                                        | 3.5       | 1.0 |
| They share concerns for the firm's objectives                                                     | 3.5       | 1.0 |
| They perform extra necessary tasks without explicit orders                                        | 3.5       | 0.9 |
| Nigerian architects show loyalty to the firm                                                      | 3.4       | 1.1 |
| They respond willingly without hesitation to orders                                               | 3.4       | 0.9 |
| They carry out orders promptly and thoroughly                                                     | 3.4       | 0.9 |
| They make personal sacrifices for the firm.                                                       | 3.4       | 0.9 |
| They stay with the architectural firm during hard times                                           | 3.3       | 0.9 |

From the twenty-two variables that explain the overall contextual performance (See Table 3), “given attention to detail”, “striving to overcome obstacles”, and “listening to clients/other professionals” were adjudged by the respondents to be the most important performance indicators for contextual performance. The least important performance indicator was “staying with the architectural firm during hard times”. They revolve around a minimum of  $3.3 \pm 0.9$  standard deviation and a maximum of  $3.7 \pm 1.2$ . From these, any Nigerian architect who must be adjudged to be performing well must be one who gives attention to details ranging from brief taking, preliminary design, to construction, and every aspect of work required of him/her as an architect. Aside from this, perseverance in carrying out responsibilities, as well as the ability to listen to clients and other allied professionals while discharging their responsibilities, are required.

### Ethical Performance

Considering the ethical performance of Nigerian architects, about 72% of the study participants rated architects to be on the positive side of the spectrum, which corresponds to excellent and good performance (Table 4). On the negative side, 12.5% of the study participants considered the architects to perform poorly on ethical issues around their professional work. Those who considered Nigerian architects to perform on average with respect to the ethics of the profession were 15.7%. On the whole, the total of personal and professional ethics, the latter of which describes the behaviour expected of an individual in an industry or a particular group within the industry, is positive among Nigerian architects.

**Table 4:** Ethical Performance Ratings

| Performance Level     | Grading Scores | Frequency<br>N | Percent<br>% |
|-----------------------|----------------|----------------|--------------|
| Very Poor Performance | 12.0 – 21.6    | 0              | 0.0          |
| Poor Performance      | 21.7 – 31.2    | 51             | 12.5         |
| Average Performance   | 31.3 – 40.8    | 64             | 15.7         |
| Good Performance      | 40.9 – 50.4    | 222            | 54.4         |
| Very Good Performance | 50.5 – 60.0    | 71             | 17.4         |
|                       |                | <b>408</b>     | <b>100.0</b> |

The results showed that the mean scores of agreement of Nigerian Architects in evaluating the ethical performance of architects involving 12 items revolved around a minimum of  $3.3 \pm 0.9$  standard deviation and a maximum of  $3.6 \pm 1.1$  standard deviation (Table 5). The issue of confidentiality and privacy of the client is a paramount performance factor of ethical issues that Nigerian architects must ensure. Added to this is a good understanding of the professional codes of conduct and ethics guiding the practice of the profession in Nigeria.

**Table 5:** Distribution of Respondents' Agreement to Indicators of Ethical Performance

| Variables of Ethical Performance                                                                                                                  | Mean Rank | SD  |
|---------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-----|
| <b>They respect the confidentiality and privacy of their client</b>                                                                               | 3.6       | 1.1 |
| <b>Nigerian architects have a good understanding of professional codes of conduct and ethics guiding their profession</b>                         | 3.5       | 1.1 |
| <b>They always carry out work competently and conscientiously, and in a responsible manner</b>                                                    | 3.5       | 1.0 |
| <b>They always uphold a professional code of conduct and ethics in all dealings with clients, other professionals, and actors in the industry</b> | 3.5       | 1.0 |
| <b>Nigerian architects avoid false claims in profiles/resumes to clients and others</b>                                                           | 3.5       | 0.9 |
| <b>They are impartial, responsible, and truthful in their professional obligation</b>                                                             | 3.5       | 0.9 |
| <b>They avoid all forms of conflict of interest</b>                                                                                               | 3.5       | 0.9 |
| <b>They do not get involved in all manner of fraudulent activities, either in the office or on sites</b>                                          | 3.5       | 0.9 |
| <b>They always abide by the approved drawings and building codes on sites</b>                                                                     | 3.4       | 1.1 |
| <b>They do not discriminate on the grounds of gender, religion, or disability</b>                                                                 | 3.4       | 1.1 |
| <b>They always keep proper records of all money held on behalf of the organization/, firm, or client</b>                                          | 3.4       | 0.9 |
| <b>They remit all taxes and dues to the authority as due</b>                                                                                      | 3.3       | 0.9 |

## Task Performance

Task performance revolves around the prescribed cognitive abilities of any professional. Architects must face greater scrutiny in this aspect. It indicates the proficiency of the professional at doing the job prescription with respect to his/her qualifications (Borman & Motowidlo, 1997). Sixty-six per cent (66%) of study participants adjudge Nigerian architects' performance with respect to their cognitive ability good, with 20% rating them bad (Table 6). Those who described Nigerian architects as of average performance task-wise were about 13.5%. The knowledge, skill, and ability that the study participants observed amongst Nigerian architects are generally positive.

**Table 1:** Task Performance Ratings

| Performance Level     | Grading Scores | Frequency<br>n | Percent<br>% |
|-----------------------|----------------|----------------|--------------|
| Very Poor Performance | 27.0 – 44.6    | 31             | 7.6          |
| Poor Performance      | 44.7 – 62.2    | 53             | 13.0         |
| Average Performance   | 62.3 – 79.8    | 55             | 13.5         |
| Good Performance      | 79.9 – 97.4    | 203            | 49.8         |
| Very Good Performance | 97.5 – 115.0   | 66             | 16.2         |
|                       |                | <b>408</b>     | <b>100.0</b> |

The results showed that the mean scores of agreement of Nigerian Architects in evaluating the task performance of architects involving 23 performance indicators revolved around a minimum of  $3.3 \pm 0.9$  standard deviation and a maximum of  $3.8 \pm 1.3$  standard deviation (Table 7). Topmost among performance indicators required of Nigerian architects in the area of task performance is the ability to generate a design that can be easily realised as a building. The architect must also recognise the need for the sustainability of the natural and built environment, as well as being creative in design.

**Table 7:** Distribution of Respondents' Agreement to Indicators of Task Performance

| Variables of Task Performance                                                                                         | Mean Rank | SD  |
|-----------------------------------------------------------------------------------------------------------------------|-----------|-----|
| They recognise the need to sustain the natural and the built environment                                              | 3.7       | 1.2 |
| They are creative in design concept, clearly                                                                          | 3.7       | 1.2 |
| Nigerian architects generate design concepts that can easily be realised as a building                                | 3.8       | 1.3 |
| They interpret the project brief and decide on design objectives precisely                                            | 3.7       | 1.2 |
| They agree with the client and interested parties about the schematic design                                          | 3.7       | 1.1 |
| They carefully consider choices of structural systems and construction materials                                      | 3.6       | 1.1 |
| They carefully consider building services in the design                                                               | 3.6       | 1.1 |
| They produce excellent working drawings                                                                               | 3.6       | 1.1 |
| They are aware of regulatory building codes                                                                           | 3.6       | 1.1 |
| They negotiate and agree on the detailed design proposal with the client and other interested parties                 | 3.5       | 1.1 |
| They resolve all components of the design before preparing the tender documents preparation                           | 3.5       | 1.1 |
| They can employ ICT skills in presentations, detailed drawings, contractual documents, emails, etc                    | 3.5       | 1.1 |
| They always prepare architectural specifications and schedules                                                        | 3.5       | 1.0 |
| They always establish site conditions before design                                                                   | 3.5       | 1.0 |
| They monitor compliance with contract documents and relevant regulatory authorities                                   | 3.5       | 1.0 |
| They always comply with the law and regulations governing the conduct of an architectural practice                    | 3.5       | 1.0 |
| They assess how the project will affect/be affected by the environment and the community                              | 3.5       | 0.9 |
| They provide handover advice and as-built records                                                                     | 3.4       | 1.1 |
| Nigerian architects have practice objectives and establish a practice structure and strategies for their achievements | 3.4       | 0.9 |
| They establish and maintain practice management systems                                                               | 3.4       | 0.9 |
| They always provide necessary updated detailed information (written/drawing) for the construction                     | 3.3       | 1.1 |
| They undertake post-occupancy evaluation and assess for future operational use                                        | 3.3       | 0.9 |

|                                          |     |     |
|------------------------------------------|-----|-----|
| <b>They deploy and manage staff well</b> | 3.3 | 0.9 |
|------------------------------------------|-----|-----|

## Conclusion

The study identified nine performance indicators along the three areas of performance: contextual performance, task performance, and ethical performance, which help measure the performance of Nigerian architects. These nine performance indicators are found to help assess the overall performance of the Nigerian architects. Each of the three areas of performance has three indicators each. However, the first among these nine performance indicators is a factor under the task performance, which has to do with designing a concept that can be constructed. The following three performance indicators are under the contextual performance, which support the environment in which the technical core (task) operates. It encompasses interpersonal behaviours and organisational citizenship behaviours. The last three indicators fall under ethical performance.

**Table 8: Highest reported Mean score of selected Overall Performance indicators**

| <b>Variables of Overall Performance</b>                                                                                   | <b>Mean</b> |
|---------------------------------------------------------------------------------------------------------------------------|-------------|
| <b>Nigerian architects generate design concepts that can easily be realised as a building</b>                             | 3.8         |
| <b>They pay close attention to important details in their work</b>                                                        | 3.7         |
| <b>They strive to overcome obstacles that may hinder any task</b>                                                         | 3.7         |
| <b>Nigerian architects have a good ability to listen to clients and other construction professionals</b>                  | 3.7         |
| <b>They recognise the need to sustain the natural and the built environment</b>                                           | 3.7         |
| <b>They are creative in design concept, clearly</b>                                                                       | 3.7         |
| <b>They respect the confidentiality and privacy of their client</b>                                                       | 3.6         |
| <b>Nigerian architects have a good understanding of professional codes of conduct and ethics guiding their profession</b> | 3.5         |
| <b>They always carry out work competently and conscientiously, and in a responsible manner</b>                            | 3.5         |

Measuring the performance of the architect as one of the essential stakeholders in the building/construction industry is very important for the organisation in the areas of employment, remuneration, promotion, and redundancy. It helps the organisation in delivering projects on time, within the projected cost, and ensuring the quality of the project delivered. The performance indicators identified in this study can be used to measure the performance of architects and help improve the outlook of the industry as a whole, since the organisations will be better off when they have a competent workforce discharging responsibilities to various clients. In the same vein, the training of would-be architects in various architectural schools can focus intensely on these germane factors that enhance the performance of the architect later in practice.

## References

- Abejide, F. (2024). Exploring Team Performance, Collaboration, and Their Impact on Project Success. *School of Technology, Cardiff Metropolitan University*.
- Abun, D., Nicolas, M. T., Apollo, E., Magallanes, T., & Encarnacion, M. J. (2021). Employees' self-efficacy and work performance as mediated by the work environment. *International Journal of Research in Business and Social Science (2147-4478)*, 10, 01–15.
- Aghimien, L. M., & Aigbavboa, C. (2024). A PLS-SEM Analysis of Emotional Intelligence and Construction Organisation's Performance Nexus in South Africa. *Buildings*, 14(11), 3393.
- Alkilani, S., & Loosemore, M. (2022). Project performance measurement for small-and medium-sized construction contractors in the Jordanian construction industry. *Construction Management and Economics*, 40(10), 743–769.
- Architect Registration Council of Nigeria (ARCON) (2013). Register of accredited architectural firms in Nigeria. [Arcon.org.ng/sites/default/files/downfiles/AccreditedFirms2013.pdf](http://Arcon.org.ng/sites/default/files/downfiles/AccreditedFirms2013.pdf). Accessed on 8 February, 2015
- Borman, W. C., & Motowidlo, S. J. (1993). Expanding the criterion domain to include elements of contextual performance. In N. Schmitt, W. C. Borman, & Associates (Eds.), *Personnel selection in organisations* (pp.71–98). San Francisco, CA: Jossey-Bass.
- Borman, W. C., & Motowidlo, S. J. (1993). Expanding the criterion domain to include elements of contextual performance. In N. Schmitt & W. C. Borman (Eds.), *Personnel selection in organisations* (pp. 71–98). San Francisco, CA: Jossey-Bass.
- Borman, W. C., & Motowidlo, S. J. (2021). Expanding the boundaries of contextual performance in modern organisations. *Journal of Organisational Behaviour*, 42(3), 375–392. <https://doi.org/10.1002/job.2491>
- Borman, W. & Motowidlo, S. (1997). Task Performance and Contextual Performance: The Meaning for Personnel Selection Research, *Human Performance*, 10:2, 99-109
- Bristol-Alagbariya, B., Ayanponle, O. L., & Ogedengbe, D. E. (2022). Developing and implementing advanced performance management systems for enhanced organisational productivity. *World Journal of Advanced Science and Technology*, 2(1), 39–46.
- Çalışkan, A., & Köroğlu, E. Ö. (2022). Job performance, task performance, contextual performance: development and validation of a new scale. *Uluslararası İktisadi ve İdari Bilimler Dergisi*, 8(2), 180–201.
- Chaudhary, R., & Panda, C. (2022). Linking contextual performance to innovation: The mediating role of organisational learning. *European Management Review*, 19(1), 85–100. <https://doi.org/10.1111/emre.12477>
- Cunha, F., Dinis-Carvalho, J., & Sousa, R. M. (2023). Performance measurement systems in continuous improvement environments: Obstacles to their effectiveness. *Sustainability*, 15(1), 867.
- El Fallahi, F., Ibenrissoul, A., & El Amri, A. (2023). Defining and Measuring Overall Performance in Emerging Countries: A Comprehensive Financial Perspective Review. *Financial Markets, Institutions and Risks*, 7(3), 81–93.
- El-sawalhi, N., & Lafy, R. (2021). The Relationship between Project Management Managers' Competencies and Employees' Performance in the Construction Industry in the Gaza Strip. *International Journal of Sustainable Construction Engineering and Technology*, 12(2), 38-52.
- Faozen, F., & Sandy, S. R. O. (2024). Performance management: A new approach to performance management. In *Human Resource Management: An Update*. Intech Open.
- Frare, A. B., Beuren, I. M., & Silva, E. S. D. (2022). Performance measurement system, organisational learning, and creativity. *BAR-Brazilian Administration Review*, 19(04), e210099.
- Fraser, J., Burgess, A., Burfoot, M., & Walker, C. (2023). Ethics, care, and the architect's responsibility to society and the environment. *Environmental Science & Sustainable Development*, 01–18.
- Hameed, A., Khwaja, M. G., & Zaman, U. (2023). Configuring optimal contextual performance and task performance in offshore business processing organisations. *Business Process Management Journal*, 29(1), 285–307.
- Huemann, M., & Turner, J. R. (Eds.). (2024). *The handbook of project management*. Routledge.
- Ibrahim, A., Zayed, T., & Lafhaj, Z. (2024). Enhancing construction performance: A critical review of performance measurement practices at the project level. *Buildings*, 14(7), 1988.
- Ibrahim, A., Zayed, T., & Lafhaj, Z. (2024). Enhancing construction performance: A critical review of performance measurement practices at the project level. *Buildings*, 14(7), 1988.
- Ibrahim, A., Zayed, T., & Lafhaj, Z. (2024). Enhancing construction performance: A critical review of performance measurement practices at the project level. *Buildings*, 14(7), 1988.
- Ikuabe, M., Aigbavboa, C., Anumba, C., Oke, A., & Aghimien, L. (2022). Confirmatory factor analysis of performance measurement indicators determining the uptake of CPS for facilities management. *Buildings*, 12(4), 466.

- Ilgen & E. D. Pulakos (Eds.), *The changing nature of job performance: Implications for staffing, motivation, and development* (pp. 56–86). San Francisco, CA: Jossey-Bass
- Kamau, M. N. (2024). *Management of Project Alliancing and Performance of Building Construction Projects in Nairobi City County, Kenya* (Doctoral dissertation, Kenyatta University).
- Kuoribo, E., Owusu-Manu, D. G., Yomoah, R., Debrah, C., Acheampong, A., & Edwards, D. J. (2023). Ethical and unethical behaviour of built environment professionals in the Ghanaian construction industry. *Journal of Engineering, Design and Technology*, 21(3), 840–861.
- Lam, T. Y. (2022). Driving sustainable construction development through post-contract key performance indicators and drivers. *Smart and Sustainable Built Environment*, 11(3), 483–499.
- Lawoyin, J. O. (2023). Toward a BIM-Enabled Collaborative Model for Architect-Led Project Delivery Systems. *International Scientific Refereed Research Journal*, 6 (4) 467-510
- Manu, P., Poghosyan, A., Agyei, G., Mahamadu, A. M., & Dziekonski, K. (2021). Design for safety in construction in sub-Saharan Africa: a study of architects in Ghana. *International Journal of Construction Management*, 21(4), 382–394.
- Mazzetto, S. (2024). Interdisciplinary perspectives on agent-based modelling in the architecture, engineering, and construction industry: a comprehensive review. *Buildings*, 14(11), 3480.
- Mills, D., Pudney, S., Pevcin, P., & Dvorak, J. (2021). Evidence-based public policy decision-making in smart cities: Does extant theory support achievement of city sustainability objectives?. *Sustainability*, 14(1), 3.
- Mio, C., Costantini, A., & Panfilo, S. (2022). Performance measurement tools for sustainable business: A systematic literature review on the sustainability balanced scorecard use. *Corporate social responsibility and environmental management*, 29(2), 367–384.
- Motowidlo, S. J., & Kell, H. J. (2012). Job performance. In S. Kozlowski (Ed.), *The Oxford Handbook of Organisational Psychology* (Vol. 1, pp. 82–138). Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780199928309.013.0005>
- Motowidlo, S. J., & Schmit, M. J. (1999). Performance assessment in unique jobs. In D. R.
- Mughal, M. A., Khalid, K., & Farooqi, R. (2025). Business Process Management as an enabler for behavioural resources: A Predictive Model for Overcoming Project Management to Outcomes. *Annual Methodological Archive Research Review*, 3(8), 163–193.
- Najafi, M., Rahimian, F., & Akanmu, A. A. (2025). Human-centric innovation in the built environment. *Smart and Sustainable Built Environment*, 14(4), 883-888.
- Oke, A. E., Aghimien, D. O., & Aigbavboa, C. O. (2023). Assessing stakeholder performance in sustainable construction delivery: Toward a multidimensional evaluation model. *Sustainability*, 15(3), 2529. <https://doi.org/10.3390/su15032529>
- Olawale, O. (2024). *A multi-dimensional evaluative framework for examining project reputation within the construction industry: Contractors' perspective* (Doctoral dissertation).
- Olayeni K. P. (2017). A study of the job performance of architects in the Nigerian building industry. Unpublished Ph.D. Thesis, submitted to the Department of Architecture, Obafemi Awolowo University, Ile-Ife, Nigeria.
- Otero, I., Salgado, J. F., & Moscoso, S. (2021). Criterion validity of cognitive reflection for predicting job performance and training proficiency: A meta-analysis. *Frontiers in Psychology*, 12, 668592.
- Shrestha, A. (2024). Ethics, Integrity, and Professional Standards. In *Construction Company Management* (pp. 16–37). Routledge.
- Sonnentag, S. & Frese, M. (2000). Performance Concepts and Performance Theory in *Psychological Management of Individual Performance*. Edited by Sabine Sonnentag. John Wiley & Sons, Ltd
- Tambare, P., Meshram, C., Lee, C. C., Ramteke, R. J., & Imoize, A. L. (2021). Performance measurement system and quality management in data-driven Industry 4.0: A review. *Sensors*, 22(1), 224.
- Xiong, B., Newton, S., & Skitmore, M. (2022). Towards a conceptual model of the job performance of construction professionals: A person-environment fit perspective. *International Journal of Construction Management*, 22(7), 1308–1322.
- Zhou, Z., Zhang, L., & Wang, B. (2022). Performance measurement frameworks for design professionals in collaborative construction environments. *Engineering, Construction and Architectural Management*, 29(10), 3682–3701. <https://doi.org/10.1108/ECAM-01-2021-0009>
- Zulu, S. L., Saad, A., Ajayi, S., & Unuigbo, M. (2023). *Determinants of an effective digital transformation in construction organisations: A qualitative investigation*. *Built Environment Project and Asset Management*, 13(6), 896–912. <https://doi.org/10.1108/BEPAM-02-2023-0045>