



CHALLENGES MILITATING AGAINST EFFECTIVE HUMAN RESOURCES MANAGEMENT IN RESIDENTIAL PROPERTY DEVELOPMENT IN OWERRI METROPOLIS IMO STATE, NIGERIA

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ABSTRACT: *The effective management of human resources (HR) is a critical determinant of successful residential property development, particularly in rapidly urbanizing environments such as Owerri Metropolis, Imo State, Nigeria. Despite the increasing demand for residential properties in the metropolis, numerous challenges continue to hinder effective human resource management (HRM) within the property development sector. This study explored these challenges by drawing insights from property developers, construction professionals, and HR practitioners. A mixed-methods approach was adopted, using structured questionnaires administered to 213 stakeholders, of which 174 valid responses were analyzed, representing an 81.7% response rate. Both descriptive statistics (frequency, mean, RII) and inferential (regression analysis) analyses were employed to examine the extent of HRM challenges and their impact on development outcomes. Findings revealed that major HRM challenges included inadequate training and capacity building, high labor turnover, poor motivation and welfare schemes, weak recruitment and selection processes, limited technological integration, and regulatory bottlenecks. The study further showed that these challenges significantly affected productivity, cost efficiency, and project delivery timelines in residential property development. The study concluded that addressing HRM challenges through continuous professional development, fair labor practices, and the adoption of modern HR technologies can substantially improve performance outcomes in the sector. The study recommended policy support, capacity-building initiatives, and a more structured HR framework to enhance the efficiency and sustainability of residential property development in Owerri Metropolis.*

KEYWORDS: Human resource management, Militating challenges, Property development, Residential housing, Construction workforce.



INTRODUCTION

The construction and real estate sector plays a vital role in national development, contributing significantly to infrastructure provision, housing supply, employment generation, and urban growth. In Nigeria, residential property development is a critical component of the construction industry, as it responds directly to the housing needs of a rapidly growing population and urbanization pressures (Akinyemi & Ojo, 2018). Effective management of human resources (HR), the workforce that drives this sector, has therefore become indispensable for ensuring that residential property projects are delivered on time, within cost, and at the desired quality (Fapohunda, 2020). In Nigeria, the residential property development sector is central to addressing the increasing housing demand caused by urbanization and population growth (National Population Commission (NPC), 2020). Owerri Metropolis, the capital of Imo State, has experienced rapid urban expansion, which has intensified the demand for affordable and quality residential properties (Okeke, 2019). However, despite the growing opportunities in the housing market, developers are confronted with HRM-related challenges such as skill shortages, poor labor productivity, weak institutional capacity, and limited training opportunities for workers (Akinwale & Adeogun, 2018; Ogu, 2021).

Human resource management (HRM) involves the systematic planning, recruitment, training, motivation, and retention of employees to achieve organizational goals (Armstrong & Taylor, 2020). In the context of property development, HRM ensures the availability of skilled labor, promotes safe work practices, and facilitates labor relations for optimal project delivery (Idoro, 2011). However, despite its importance, the Nigerian construction industry continues to face numerous HRM-related challenges such as inadequate training, high labor turnover, poor welfare schemes, weak recruitment practices, and limited adoption of HR technologies (Oladinrin & Ho, 2016; Ebekozi, 2020). These challenges are particularly evident in the residential property subsector, where project outcomes are highly dependent on human capital effectiveness. The management of human resources in the Nigerian property development sector is further complicated by contextual issues such as informal labor practices, cultural influences, and economic instability, which often result in project delays, cost overruns, and substandard outputs (Olusola, 2017; Chukwuma & Nwachukwu, 2022). In Owerri, circumstantial evidence suggests that the challenges of attracting and retaining skilled professionals, coupled with inadequate welfare and poor working conditions undermine the performance of residential property projects. These issues call for an in-depth investigation into the factors militating against effective HRM in the residential property development process.

Owerri Metropolis, the capital of Imo State in southeastern Nigeria, is a rapidly urbanizing city experiencing intense demand for residential housing (Nwanekezie & Opara, 2019). The growth in residential property development has exposed inherent weaknesses in HRM practices, with developers struggling to recruit and retain skilled labor, manage workplace conflicts, and comply with labor regulations (Okoye & Ezejiofor, 2013). These gaps not only inflate project costs but also result in delays, substandard construction, and reduced investor confidence in the housing sector. It is against this backdrop that the study, therefore, explores the challenges hindering effective human resources management in residential property development in Owerri Metropolis, Imo State. By examining the perspectives of developers, construction professionals, and institutional stakeholders, the research seeks to identify key HRM bottlenecks and provide recommendations to enhance project performance and sustainable housing delivery in the region.



Statement of the Problem

Although several studies have examined the challenges of construction management in Nigeria (Idoro, 2011; Fapohunda, 2020; Ebekozen, 2020), there remains limited empirical focus on the HRM dimension of residential property development in Owerri Metropolis. Existing works often generalize HRM issues within the wider construction industry, overlooking the specificities of residential property projects, which are labor-intensive and highly sensitive to workforce productivity (Oladinrin & Ho, 2016). Consequently, critical gaps exist in understanding how HRM challenges such as training deficiencies, labor turnover, and poor motivation schemes hinder effective project delivery in Owerri. Without targeted research, interventions to improve HRM practices in this subsector may remain inadequate or misaligned with local realities.

Study Rationale

This study is therefore timely and significant, as it seeks to explore the challenges militating against effective HRM in residential property development within Owerri Metropolis. By identifying and ranking the key HRM challenges faced by developers, the research provides evidence-based insights that can guide policymakers, industry stakeholders, and property developers in implementing strategic solutions. Addressing these challenges has implications not only for improving housing delivery and reducing project delays but also for enhancing employment conditions, workforce productivity, and overall urban development outcomes in Imo State. Furthermore, the study contributes to the broader construction management literature by contextualizing HRM challenges within a fast-growing Nigerian city, thereby enriching knowledge for comparative studies across developing economies.

Aim and Objectives of the Research

This study aims to explore the challenges militating against effective HRM in residential property development in Owerri Metropolis. And by identifying key bottlenecks and their impact on project outcomes, seeking to provide insights for policy, practice, and workforce development in the Nigerian property sector.

LITERATURE REVIEW

Human resource management (HRM) has emerged as a critical determinant of organizational performance in the construction and real estate sector. Effective HRM: encompassing recruitment, training, retention, motivation, and occupational health and safety; directly influences project productivity, cost control, time performance and quality of outputs (Becker, 1964; Barney, 1991). In residential property development, where labor constitutes a significant share of project costs and outcomes, HRM challenges directly influence productivity, timelines, and quality (Oladinrin & Ho, 2016). Human resources management (HRM) is central to organizational performance in labor-intensive sectors such as construction and real estate development. The theoretical lens of human capital theory emphasizes investment in worker skills and education as drivers of productivity (Becker, 1964). The resource-based view holds that people and organizational capability are strategic resources that provide sustained competitive advantage when rare, valuable, and hard to imitate (Barney, 1991). The following existing literature on the major HRM challenges relevant to residential property development



in Nigeria; specific attention is given to training gaps, labor turnover, motivation, adoption of HR technologies, and regulatory issues.

However, skill development is a cornerstone of effective HRM in construction, yet training remains underemphasized in Nigeria's residential property development subsector. Several studies have shown that construction workers often lack formal technical training, relying instead on informal apprenticeships and on-the-job learning (Akindele & Adebayo, 2019). This results in a mismatch between required and available skills, affecting workmanship and overall project performance. Fapohunda (2020) emphasized that inadequate training contributes to high defect rates and rework in residential projects, which escalates costs and delays delivery. Similarly, Akinyemi and Ojo (2018) argued that the lack of structured skill development programs undermines workforce adaptability to modern construction technologies. In Owerri Metropolis, where residential projects are expanding rapidly, this training gap poses a serious challenge, as unskilled labor may not cope with the quality standards expected by developers and clients.

Similarly, high labor turnover is another pressing HRM challenge in construction projects. Turnover refers to the rate at which workers leave organizations, either voluntarily or involuntarily, and it disrupts project continuity, increases recruitment costs, and erodes organizational knowledge (Chileshe & Haupt, 2010). Studies across Nigeria reveal that construction firms struggle to retain skilled workers due to poor working conditions, lack of career advancement opportunities, and irregular wage payments (Ebekozi, 2020). High attrition levels are particularly damaging in residential property development, where consistency in labor is required to maintain building quality. In the context of Owerri, anecdotal evidence suggests that many artisans and skilled workers migrate to cities like Lagos and Abuja in search of better-paying opportunities, leaving local developers grappling with workforce shortages.

Notably, employee motivation and welfare significantly affect labor productivity and project performance. Theories of motivation, such as Maslow's hierarchy of needs and Herzberg's two-factor model, stress the importance of fair compensation, job security, and recognition in enhancing workforce morale (Armstrong & Taylor, 2020). However, Nigerian construction firms often underinvest in worker welfare schemes, offering poor remuneration, limited health benefits, and weak safety nets (Okoye & Ezejiofor, 2013). Empirical studies show that poor motivation correlates with absenteeism, low commitment, and higher defect rates in construction projects (Fapohunda, 2020). In Owerri, developers' limited financial capacity exacerbates this challenge, as many small and medium-sized firms cannot afford competitive salaries or welfare packages. This creates a cycle of low morale, reduced productivity, and further project inefficiencies.

The integration of information and communication technologies (ICTs) in HRM, covering areas such as recruitment, payroll, performance monitoring, and workforce planning, has transformed industries globally (Bondarouk & Brewster, 2016). In construction, HR technologies enable data-driven decision-making, improve communication, and enhance workforce monitoring. Despite these benefits, adoption levels in Nigeria remain low due to cost barriers, lack of awareness, and limited technical capacity (Adeleke et al., 2017). Oladinrin and Ho (2016) observed that most Nigerian construction firms rely on manual HR practices, which are inefficient and prone to errors. For developers in Owerri, the absence of digital HR



tools means that recruitment is often informal, performance assessment is subjective, and record-keeping is weak, all of which undermine HR effectiveness.

Nevertheless, the regulatory environment shapes HRM practices through labor laws, safety standards, and employment regulations. However, weak enforcement, bureaucratic inefficiencies, and overlapping institutional responsibilities often create bottlenecks in Nigeria's construction sector (Olatunji, 2010). Regulatory challenges manifest in delayed approval processes, inconsistent labor inspections, and poor implementation of occupational health and safety standards (Ebekozen, 2020). In the residential property development subsector, these bottlenecks increase compliance costs, delay projects, and discourage formal employment practices. For example, weak enforcement of safety regulations results in unsafe work environments, increasing accident risks and compensation claims (Idoro, 2011). In Owerri, developers often bypass labor regulations to cut costs, exacerbating HRM challenges and undermining long-term workforce stability.

The reviewed studies underscore that HRM challenges in residential property development are multifaceted, cutting across workforce capacity, retention, motivation, technological adoption, and regulatory enforcement (Idoro, 2011; Fapohunda, 2020; Ebekozen, 2020). While inadequate training and high labor turnover directly affect workforce quality and stability, poor motivation and welfare reduce labor efficiency (Chukwuma & Nwachukwu, 2022; Akindele & Adebayo, 2019; Olusola, 2017; Oladinrin & Ho, 2016). Moreover, the limited adoption of HR technologies and regulatory bottlenecks constrain modern HR practices and sustainable workforce management. Despite these insights, few empirical studies have focused on Owerri Metropolis, where the interplay of rapid urbanization, informal labor practices, and resource-constrained developers presents unique HRM challenges. This study fills that gap by providing localized evidence on the hierarchy of HRM challenges affecting residential property development in Owerri, thereby contributing both to academic scholarship and practical policy solutions.

RESEARCH METHODOLOGY

This study was conducted in Owerri Metropolis, located in Imo State, southeastern Nigeria, is a fast-growing urban hub. The city's rising demand for housing has spurred residential property development but also heightened workforce management challenges. The study employed a descriptive survey research design to collect data from stakeholders involved in residential property development, including developers, contractors, engineers, HR practitioners, and artisans. Both quantitative and qualitative data were collected. The target population included property developers, contractors, architects, engineers, HR professionals, and artisans in Owerri Metropolis. Using purposive and stratified random sampling, 213 respondents were selected. Out of these, 174 valid responses were retrieved, representing an 81.7% response rate. Data were collected using structured questionnaires based on a 5-point Likert scale (1 = Strongly Disagree; 5 = Strongly Agree). Open-ended questions complemented the quantitative data. Descriptive statistics (frequency, mean ranking) were used to rank HRM challenges. Regression analysis was employed to examine the relationship between HRM challenges and project outcomes (time, cost, and quality). Qualitative responses were thematically analyzed to support quantitative findings.



DATA PRESENTATION AND RESULTS

Demographic Profile of Respondents

Out of 213 distributed questionnaires, 174 were returned and valid for analysis, representing a response rate of 81.7%. This high response rate indicates reliability in the findings and the strong relevance of the subject matter to stakeholders in the property development sector. Furthermore, the demographic profile indicated that 62% of respondents were male and 38% female, reflecting a male-dominated industry. In terms of professional categories, 40% were construction workers and artisans, 25% were engineers and architects, 20% were developers and project managers, and 15% were HR practitioners. Educational qualifications showed that 48% of respondents held university degrees, 35% had technical diplomas, and 17% had secondary education, demonstrating a mixed but moderately skilled workforce.

Challenges of Human Resource Management in Residential Property Development

Table 1 presents the challenges identified and their mean scores (based on a 5-point Likert scale).

Table 1: Challenges of Human Resource Management (N = 174)

HRM Challenge	1 (VL)	2 (L)	3 (M)	4 (H)	5 (VH)	Mean	SD	RII	Rank
Inadequate training & skill development	3 (1.7%)	6 (3.4%)	15 (8.6%)	54 (31.0%)	96 (55.2%)	4.52	0.74	0.904	1 st
High labor turnover	4 (2.3%)	7 (4.0%)	18 (10.3%)	61 (35.1%)	84 (48.3%)	4.38	0.81	0.876	2 nd
Poor motivation & welfare schemes	5 (2.9%)	8 (4.6%)	21 (12.1%)	64 (36.8%)	76 (43.7%)	4.31	0.85	0.862	3 rd
Weak recruitment/selection practices	6 (3.4%)	9 (5.2%)	23 (13.2%)	68 (39.1%)	68 (39.1%)	4.19	0.88	0.838	4 th
Limited use of HR technologies	8 (4.6%)	10 (5.7%)	26 (14.9%)	70 (40.2%)	60 (34.5%)	4.05	0.92	0.810	5 th
Regulatory & policy bottlenecks	9 (5.2%)	12 (6.9%)	30 (17.2%)	71 (40.8%)	52 (29.9%)	3.89	0.95	0.778	6 th
Conflict & poor labor relations	11 (6.3%)	14 (8.0%)	32 (18.4%)	74 (42.5%)	43 (24.7%)	3.72	0.98	0.744	7 th
Safety & health management gaps	12 (6.9%)	15 (8.6%)	37 (21.3%)	73 (42.0%)	37 (21.3%)	3.55	1.01	0.710	8 th

Key: VL = Very Low, L = Low, M = Moderate, H = High, VH = Very High

Source: Author's Field Survey, 2025.



Table 1 showed the inadequate training and skill development (mean = 4.52, RII = 0.904) was ranked 1st, this was the most critical challenge. Over 86% of respondents rated it "High" or "Very High," highlighting the lack of structured training programs and insufficient technical capacity among workers in residential property development projects in Owerri. This finding aligns with studies emphasizing skill gaps as a barrier to construction sector efficiency in Nigeria. While high labor turnover (mean = 4.38, RII = 0.876). The 2nd most pressing challenge, reported by 83% of respondents as high or very high. High attrition increases recruitment costs, destabilizes project teams, and leads to knowledge loss, thereby disrupting development timelines. And poor motivation and welfare schemes (mean = 4.31, RII = 0.862), was 3rd in ranking, underscoring the weak incentives, inadequate remuneration, and limited welfare provisions available to workers. The absence of robust reward systems undermines morale and productivity.

Additionally, weak recruitment and selection practices (mean = 4.19, RII = 0.838) was noted. About 78% of respondents identified this as a significant barrier. Poor recruitment processes lead to the engagement of underqualified personnel, thereby compounding inefficiencies in project execution. Then limited use of HR technologies (mean = 4.05, RII = 0.810) was ranked 5th; this reflects low adoption of digital HR tools such as e-recruitment platforms, payroll software, and performance management systems. Such technological gaps hinder modern HRM practices. Regulatory and policy bottlenecks (mean = 3.89, RII = 0.778) were ranked 6th. While still impactful, regulatory inefficiencies were less dominant compared to internal HR challenges. Delays in labor law enforcement and bureaucratic hurdles contribute to project slowdowns. While conflict and poor labor relations (mean = 3.72, RII = 0.744) were another challenge. Interpersonal and union–management conflicts emerged as the 7th ranked challenge. Although significant, respondents perceived it as less pressing compared to training or motivation issues.

However, safety and health management gaps (mean = 3.55, RII = 0.710) were ranked lowest, though still relevant. Issues like insufficient protective equipment, poor site safety enforcement, and weak health monitoring systems were identified but perceived as less critical than other HRM-related challenges. It implies that internal HRM challenges, particularly training gaps, labor turnover, and poor motivation, are the dominant obstacles to effective human resource management in residential property development in Owerri Metropolis. External challenges such as regulatory bottlenecks and safety concerns, though relevant, are secondary. These findings suggest that strengthening workforce capacity, improving welfare incentives, and institutionalizing structured recruitment systems should be prioritized by policymakers and developers to enhance project outcomes in the built environment.

Regression Analysis of Impact on Project Outcomes

Regression analysis was used to examine the relationship between HRM challenges and project outcomes (time, cost, and quality); a multiple regression analysis was conducted. The HRM challenges identified in Table 2 were treated as independent variables, while project outcomes (measured in terms of timeliness, cost efficiency, and quality delivery) were treated as the dependent variable.

**Table 2: Model Summary**

Model	R	R ²	Adjusted R ²	Std. Error of the Estimate
1	0.800	0.640	0.612	0.428
<i>Note. Predictors: (Constant), inadequate training and skill development, high labor turnover, poor motivation and welfare schemes, weak recruitment/selection practices, limited use of HR technologies, regulatory and policy bottlenecks, conflict and poor labor relations, safety and health management gaps. Dependent Variable: project outcomes (time, cost, quality).</i>				

Source: Author's Field Survey, 2025.

The regression model in Table 2 yielded an R² value of 0.64, indicating that approximately 64% of the variance in project outcomes can be explained by the combined effect of the HRM challenges. This suggests a strong explanatory power, implying that HRM practices directly shape the performance of residential property development projects in Owerri Metropolis.

Table 3: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	24.562	8	3.070	16.743	.000
Residual	13.838	89	0.155		
Total	38.400	97			
<i>Note. $p < 0.05$ indicates the regression model is statistically significant</i>					

Source: Author's Field Survey, 2025.

The ANOVA results in Table 3 showed $F(8, 89) = 16.743$, $p < .000$, which confirmed that the overall regression model is statistically significant.

Table 4: Coefficients

HRM Challenge	Unstandardized B	Std. Error	Standardized Beta (β)	T	Sig.
Constant	1.122	0.214	—	5.243	0.000
Inadequate training/skill development	0.3840	0.089	0.41	4.315	0.000
High labor turnover	0.342	0.102	0.36	3.353	0.001
Poor motivation/welfare schemes	0.296	0.094	0.32	3.149	0.002
Weak recruitment/selection practices	0.241	0.099	0.27	2.435	0.017
Limited use of HR technologies	0.208	0.085	0.21	2.447	0.016
Regulatory/policy bottlenecks	0.175	0.081	0.18	2.160	0.033
Conflict/poor labor relations	0.138	0.091	0.14	1.516	0.133
Safety/health management gaps	0.109	0.087	0.11	1.253	0.214

Note. Significant predictors at $p < 0.05$ are training, turnover, motivation, recruitment, technology, and policy. Conflict and safety were not statistically significant.

Source: Author's Field Survey, 2025.

The Coefficients in Table 4 showed that inadequate training ($\beta = 0.41$, $p < .000$), high labor turnover ($\beta = 0.36$, $p < .001$), and poor motivation ($\beta = 0.32$, $p < .002$) are the strongest predictors of project inefficiency. Recruitment practices, HR technology, and regulatory bottlenecks also contributed significantly, though to a lesser degree. Conflict and safety concerns, while relevant, were not significant predictors in the model. From the results, it



indicated that training, turnover, and motivation are the three most critical HRM challenges influencing residential property development in Owerri Metropolis. Together, they account for the bulk of delays, cost escalations, and quality shortfalls. Recruitment inefficiencies and poor technology adoption also exert measurable effects, suggesting that modern HRM practices remain underutilized in the study area.

Qualitative Insights

Thematic analysis revealed three dominant themes:

- a. **Skill Gaps:** Respondents noted artisans lacked knowledge of modern construction technologies.
- b. **Job Insecurity:** Workers cited casualization and poor welfare as disincentives to commitment.
- c. **Policy Inconsistency:** Delays in labor policy enforcement created uncertainty for developers.

DISCUSSION OF FINDINGS

The findings highlighted systemic HRM weaknesses in residential property development in Owerri Metropolis. The predominance of training gaps and high labor turnover, which emphasized the mismatch between workforce skills and construction industry needs. Similar challenges have been identified across Nigeria, where poor workforce capacity and inadequate HR structures undermine project delivery. Poor motivation and welfare issues, as revealed in this study, further contribute to high turnover rates and reduced worker commitment. This corroborates the opinion that fair compensation and welfare are crucial for workforce retention. Weak recruitment and selection practices also reflect broader inefficiencies in Nigeria's labor market, where informal hiring dominates construction. The limited adoption of HR technologies remains a critical gap, particularly as digital HRM platforms can enhance workforce planning, monitoring, and productivity. Regulatory bottlenecks, while ranked lower, remain relevant since inconsistent enforcement of labor policies undermines industry standards. Thus, the results showed that HRM challenges significantly affect the cost, time, and quality of residential property projects.

CONCLUSION

This study investigated the challenges militating against effective human resources management in residential property development within Owerri Metropolis, Imo State, Nigeria. The findings established that the sector is heavily constrained by inadequate training, high labor turnover, poor motivation and welfare schemes, weak recruitment practices, and insufficient technological integration. These HRM inefficiencies were found to significantly affect project outcomes by escalating costs, causing delays, and reducing overall quality in residential property development. The study concluded that sustainable solutions to these challenges require a multi-pronged approach: improving training and continuous professional development programs, institutionalizing better welfare and motivation schemes, strengthening



recruitment processes, and adopting HR technologies to streamline operations. Furthermore, government and professional bodies must collaborate to establish supportive regulatory frameworks and enforce labor standards that encourage stability and productivity in the workforce. These factors significantly hinder timely, cost-effective, and high-quality project delivery. Therefore, the study recommends:

- a. Continuous training and skill development programs for workers.
- b. Improved welfare and motivation schemes to reduce turnover.
- c. Structured recruitment and selection systems.
- d. Adoption of modern HR technologies for workforce management.
- e. Stronger policy enforcement and regulatory support.

By addressing these challenges, property developers in Owerri Metropolis can achieve improved efficiency, enhanced workforce stability, and greater sustainability in residential property delivery, thereby meeting the rising housing demand in the Metropolis, thereby contributing to Nigeria's broader housing development goals.

REFERENCES

- Adeleke, A. Q., Bahaudin, A. Y., & Kamaruddeen, A. M. (2017). Project management performance and its influence on the success of construction projects: A case study of the Nigerian construction industry. *International Journal of Business and Technopreneurship*, 7(2), 129–150.
- Akindele, O., & Adebayo, A. (2019). Skills acquisition and manpower development in Nigeria's building construction industry. *Journal of Sustainable Development in Africa*, 21(3), 52–65.
- Akinwale, A. A., & Adeogun, A. (2018). Labour productivity in the Nigerian construction industry: Challenges and prospects. *Journal of Construction in Developing Countries*, 23(1), 75–91.
- Akinyemi, O., & Ojo, A. (2018). Human capital and construction project performance in developing countries. *Journal of Construction in Developing Countries*, 23(2), 45–62.
- Armstrong, M., & Taylor, S. (2020). *Armstrong's Handbook of Human Resource Management Practice* (15th ed.). Kogan Page.
- Bondarouk, T., & Brewster, C. (2016). Conceptualizing the future of HRM and technology research. *The International Journal of Human Resource Management*, 27(21), 2652–2671.
- Boxall, P., & Purcell, J. (2016). *Strategy and human resource management* (4th ed.). Palgrave Macmillan.
- Chileshe, N., & Haupt, T. C. (2010). The effect of strategic human resource management on construction project performance in developing countries. *Construction Management and Economics*, 28(6), 553–566.
- Chukwuma, E., & Nwachukwu, C. (2022). Human resource capacity and project delivery in Nigerian housing development. *International Journal of Real Estate Studies*, 16(2), 45–57.



- Ebekozien, A. (2020). Human resource management practices in the Nigerian construction industry: Challenges and prospects. *International Journal of Construction Management*, 20(6), 1–10.
- Fapohunda, J. (2020). Workforce management issues in construction project delivery: Evidence from Nigeria. *Built Environment Project and Asset Management*, 10(3), 445–460.
- Idoro, G. I. (2011). Influence of in-sourcing and outsourcing of consultants on construction project performance in Nigeria. *Construction Management and Economics*, 29(6), 635–643.
- National Population Commission (NPC). (2020). *Nigeria demographic and health survey*. Abuja: NPC.
- Nnaji, C., & Okoro, O. (2020). Human resource management practices and construction project performance in Nigeria. *Nigerian Journal of Management Studies*, 18(3), 22–36.
- Nwanekezie, I., & Opara, C. (2019). Housing demand and urban growth in Owerri Metropolis, Nigeria. *Journal of African Urban Studies*, 5(1), 88–104.
- Ogu, V. (2021). Housing development and human resources challenges in urban Nigeria. *Journal of African Built Environment Research*, 12(2), 99–115.
- Okeke, P. (2019). Urban expansion and housing demand in Owerri Metropolis. *Nigerian Journal of Urban Studies*, 7(1), 33–48.
- Okoye, P. V. C., & Ezejiofor, R. A. (2013). The effect of human resource development on organizational productivity. *International Journal of Academic Research in Business and Social Sciences*, 3(10), 250–268.
- Oladinrin, T. O., & Ho, C. M. F. (2016). Critical challenges of human resource management in construction: A developing country perspective. *Journal of Management in Engineering*, 32(6), 04016022.
- Olatunji, O. A. (2010). Influences on construction project delivery time in Nigeria: A risk analysis. *Journal of Construction in Developing Countries*, 15(1), 49–67.
- Olusola, R. (2017). Labour challenges in the Nigerian housing construction sector. *Journal of Property and Construction Management*, 5(2), 88–104.