IMPROVEMENT OF THE PERFORMANCE OF THE CONSTRUCTION INDUSTRY THROUGH EDUCATION AND TRAINING

Editorial December 2022

Introduction

This is the tenth issue of the Journal of Construction Business and Management, a combination of the regular issue and a special issue of selected papers from Construction Business and Project Management CBPM 2021 conference proceedings. This issue contains five blind double peer-reviewed articles by seventeen scholars in Nigeria, South Africa, and Malaysia covering strategic management, environmental pollution, compliance with building standards, dispute resolution, and performance management. Despite the difference in the topics, one of the key issues highlighted by the papers is the emphasis on improving education and awareness in the industry to address the issues identified in the papers. Following this introduction is the discussion of the papers, after which the conclusion follows.

Discussion of the papers

Compliance with construction regulations, standards and codes is fundamental to improving the key performance indicators, by implication, project performance (Umeokafor et al. 2022). Further, this means that it has implications for project risks. While developed countries still record compliance issues which have resulted in tragic events such as the Grenfell fire incident, the developing ones are not left behind, demonstrated to be worse in many indicators. Opawole, Alao, Yusuf, Adu and Ofoetan (2022) examine one of the major issues in building construction in Nigeria, construction materials-related building collapse. Using survey questionnaires, the authors assess the determinants of compliance with concreting materials standards in building projects in Nigeria, using one of the country's major cities, Lagos, as a case study. Being site-based and non-site based, the factors are in six categories, regulation, procurement, capacity, technical, performance and skills components. Production quality control, non-compliance with specified concrete mix, low concrete grade and supervision by incompetent persons are among the site-based factors. However, non-site-based ones include procurement policies and regulatory frameworks in efficiency and professionalism. It was also found that non-compliance with the national standards results in rework, project delays, additional costs, and environmental issues. To improve the quality of buildings through compliance with concreting materials and reduce or eliminate building collapse, the regulatory policies and enforcement mechanism, competencies and training, and ethical standards of stakeholders require more attention. While the generalisation of the findings is limited to Lagos state, given that it is one of the states with a high volume of construction, the study is, at least, indicative of what happens in major cities in Nigeria, such as Abuja and Port-Harcourt.

The second paper, by Rambaruth, Adam and Krishna (2022), on strategic management in construction small and medium enterprises (SMEs), addresses another pertinent issue. SMEs outnumber the large enterprises, the heart of the economies of countries. Yet, they face challenges, which in many cases are different from their large counterparts, for example, limited access to funds and competent persons. Many of these SMEs in construction lack strategic planning, one of the factors for early failure (Rambaruth et al., 2022). Many policies, strategies and studies are informed by large enterprises' views and contexts, overlooking the SMEs. Consequently, the authors examine the determinants of a company's decision to adopt a strategic plan, the role of strategic planning in improving a company's performance, and the challenges associated with a strategic plan in place. Using the eThekwini region of South Africa as a case study, the study found that key factors for strategic management in the construction SMEs examined include increased productivity, the quest to gain competitive

advantage and improved decision-making. It was good to find that most of them adopted strategic management practices to improve business performance. The authors conclude that one of the ways of improving strategic management in construction SMEs is through improved education and awareness education and broadened skills curriculum by the government. Government and tertiary institutions can also integrate strategic management into SME training programmes. The need for education and awareness, consistent with the recommendations of Opawole et al. (2022), highlights the need for more attention to education and training in the construction and property industry.

Graduate architects are the future of tomorrow in the profession; they are yet to pass the professional examination but hold a master's degree in Architecture. The need to exploit education to improve the construction industry's performance is furthered in the third paper by Tiew, Hashim and Zolkafli (2022). Tiew et al. (2022). investigate the major performance barriers that graduate architects encounter in project implementation. These factors are skills-based, poor project documentation management, lack of soft skills, inadequate quality assessment management, and a shortfall in design management. While it highlights the areas the universities can focus on, adequately integrating them into the curricula is consistent with the recommendations of Opawole et al. (2022) and Rambaruth et al. (2022) in this issue.

While education empowers the learners with knowledge, the process may have implications for their health and the environment. Addressing educational issues that have consequences for the environment and students' health is the focus of Nkeleme, Mbamali and Shakantu (2022). The authors measured the number of combustion pollutants generated while learning and teaching in laboratories at one of Nigeria's leading universities (Ahmadu Bello University Zaria) and their effect on indoor air quality. Nkeleme et al. found that the presence of CO during the combustion is above ASHRAE 62 and NAAQS limit of 9ppm reaching up to 45ppm at some points and oxygen at the critical level, 20.9 per cent or below 20.4 per cent. The authors also found that the laboratories are congested, and inadequate ventilation systems exacerbate the discomforting effects of combustion-generated pollutants. Adequate ventilation should be provided, which is one of the paper's recommendations. The students learning environment, including the physical ones, is one of the barriers to learning; it should facilitate and support education (Cleveland and Fisher 2014).

Undoubtedly, COVID-19 has socio-economic and health implications globally. However, it has increased attention on technology, mental health and some aspects of risk management in construction. Amoo, Lukman and Musa (2022) is the last paper, focussing on dispute resolution methods in construction during COVID-19, where South Africa is used as a case study. The aim is to determine their appropriateness and effectiveness. The findings demonstrate the negative implication of an interest-based approach rather than the right-based approach to resolving disputes in construction. Further, the study shows that negotiation, mediation, and conciliation were adopted to resolve unforeseen delays, claims, and added costs during the pandemic. The pandemic draws attention to pricing methods as a significant source of dispute in the supply and demand chain network during the period. It highlights the imperativeness of clear language in contracts, risk management training, communication improvement, and dynamic project schedule documentation as some conflict and dispute resolution tools post-COVID.

Conclusion

This issue which contains five papers from seventeen scholars in Nigeria, South Africa, and Malaysia, covers strategic management, environmental pollution, compliance with building

standards, dispute resolution, and performance management. While the findings vary, one consistent key finding or implication of this is the need for education and training to improve the construction industry's performance. This is in terms of performance improvement skills of graduate architects, risk management training for those with contract and risk management responsibilities, integrating strategic management education in curricula, and building materials standard compliance training.

We thank the authors for their contributions and the reviewers for their efforts to improve the quality of the papers published by the journal. The journal editorial board and panel of reviewers also play a critical part in the higher quality assurance of the manuscript and in keeping the journal on the path to attaining the expected standard and quality. Criticisms, feedback, and suggestions from readers on improving the journal's quality are also welcome.

References

Amoo, O. T., Lukman, Y. and Musa, N., 2022. Dispute Resolution Mathods adopted by Contractors during Covid-19 in Eastern Cape, South Africa: A Case Study. *Journal of Construction Business and Management*, 5(2): 54-67.

Cleveland, B. and Fisher, K., 2014. The evaluation of physical learning environments: a critical review of the literature. *Learning Environ Res*, 17:1–28

Nkeleme, E. I., Mbamali, I. and Shakantu, W. M. I., 2022. A Measure of Combustion-Generated Pollutants in University Laboratories and its Effects on Indoor Air Quality. *Journal of Construction Business and Management*, 5(2): 44-53.

Opawole, A., Alao, O. O., Yusuf, A. O., Adu, E. T. and Ofoetan, M. A., 2022. Evaluation of Compliance of Concreting Materials to Standards in Building Projects in Lagos State, Nigeria. *Journal of Construction Business and Management*, 5(2): 1-19.

Rambaruth, A., Adam, J. K. and Krishna, S. B. N., 2022. Elements and Issues to Strategic Management in the Construction Industry Among Small and Medium Enterprises: A Case Study in South Africa's eThekwini Region. *Journal of Construction Business and Management*, 5(2): 20-28.

Tiew, S. Y., Hashim, H. A. and Zolkafli, U. K. B., 2022. Performance Barriers affecting Graduate Architects in Architectural Firms: A Systematic Literature Review. *Journal of Construction Business and Management*, 5(2): 29-43.

Umeokafor, N. I., Evangelinos, K. and Windapo, A. O., 2020. Strategies for Improving Complex Construction Health and Safety Regulatory Environments. *International Journal of Construction Management*.Doi.org/10.1080/15623599.2019.1707853.

Nnedinma Umeokafor PhD
Associate Editor, Journal of Construction Business and Management

Prof. Abimbola Windapo
Editor-in-Chief, Journal of Construction Business and Management, 5(2):