

Construction Economics and Building

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EDITORIAL

A New Era of Transformation for "Construction Economics and Building"

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As I step into the role of Editor-in-Chief for the "Construction Economics and Building" journal, I wish to express our heartfelt appreciation to Dr Graham Brewer for his exemplary leadership over the years. Under his leadership, the journal has established itself as the journal of choice for many built environment academics seeking open-access publication without Article Processing Charges (APC). This has been made possible through financial support from the Australian Institute of Building(AIB) and the Australian Institute of Quantity Surveyors(AIQS).

I am honoured by the opportunity to guide this esteemed journal into the future, even though my current role is to take care of the transition period, as the journal's financial sponsors take stock of the past and plan for the long-term strategic direction of the journal. The global community is in a moment where the convergence of technological innovation, economic volatility, and sustainability imperatives demands a renewed focus on rigorous and impactful research for the built environment.

Since its establishment, the journal has evolved into a dynamic platform for insightful research discussions. The journal's present Q2 rating on Scopus (CiteScore: 3.8 & SJR: 0.411) reflects our authors' diligent contributions, reviewers' thorough efforts, and readers' unwavering support. Our strategic goal is to work towards achieving Q1 status and expand indexing services to include Engineering Index (EI) and Science Citation Index (SCI). To achieve this goal, I have put together a diverse team of editors to support me in my role, and these include Dr Yaning Qiao (China University of Mining and Technology, China), Dr Patrick O'Donnell



(Analytikk Consultant Services, Australia), Dr Riza Yosia Sunindijo (University of New South Wales, Australia) and Dr Chioma Okoro (University of Johannesburg, South Africa).

The construction industry is the cornerstone of many global economies and is undergoing a profound transformation with the rise of digital twins, modular construction, and advanced materials, all promising to reshape how we design, build, and manage infrastructure. Again, the industry is grappling with pressing global challenges, including the urgent need to decarbonize the built environment.

The Construction Economics and Building Journal is an important platform for disseminating cutting-edge research that bridges the gap between theory and practice and addresses the current global challenges. The journal, therefore, encourages research that integrates perspectives from economics, engineering, management, architecture, and social sciences. Notable topics of interest may include Emerging and Advanced Technologies such as digital transformation, automation, blockchain, artificial intelligence (AI), and immersive technologies in the context of the built environment.

Additionally, sustainability and decarbonisation are high on the agenda of many academics and would encourage research that explores sustainable technologies and circular economy toward decarbonisation and achieving a net-zero carbon built environment.

This first issue of the 2025 volume of the journal brings together ten (10) papers under these three (3) main themes;

Sustainable Project Management

The first paper by *Akotia and Awuzie* explore the promotion of social sustainability factors in the delivery of sustainable regeneration projects in the UK. The results reveal that health and safety issues were the most promoted among the other six key social sustainability drivers. The findings indicate that various efforts and legislations initiated by the UK government to improve health and safety practices within the construction industry have played a key role in promoting health and safety issues in the delivery of sustainable construction projects.

Weerasuriya et al. examine construction projects' issues and appropriate solutions related to quality, progress, and payment certifications through a systematic literature review and recommend using blockchain and smart contracts as technological solutions to overcome certification-related challenges in construction projects.

Okello et al. discuss the role of project delivery methods on the execution of construction projects using the case of Kenyan Judiciary construction projects funded by the World Bank. The study shows that project delivery methods significantly influenced the execution of construction projects regarding quality, cost, and site disputes and further highlights the need for flexible, context-specific project delivery approaches.

Construction Business Performance

Several construction industry reports, such as Latham, Egan, Farmer's Review, etc., all raised the issue of performance in the construction industry. *Huynh et al.* propose a support tool for labour productivity management in construction and this tool offers a structured and informative approach to assessing and enhancing labour productivity in construction projects. The research contributes to the ongoing efforts to address labour productivity challenges in the construction industry.

Rajala et al. examine the Building Renovation (BR) business and profitability from an operational perspective, focusing on daily activities involved in completing renovation works. The findings provide insight into how operational effectiveness affects building renovation companies' profitability.



Pramudya et al. examine the influence of project characteristics on the likelihood of claims and quantify these characteristics to help calculate the premium value of the Contractor's all-risk (CAR) insurance. The study maps the Contractor's all-risk insurance risks based on historical data from the policies and claims of two major Indonesian insurance firms and showed that risks causing substantial claims are attributed to natural and man-made disasters.

Building Construction and Technology

Alnaqbi et al. presents Machine learning applications for predicting longitudinal cracking in continuously reinforced concrete pavement. The study illustrates the shortcomings of traditional regression models and the benefits of adopting machine learning methods for identifying intricate nonlinear correlations. It demonstrates that pavement age, traffic loads, and environmental factors, specifically temperature and precipitation, considerably impact longitudinal cracking.

Chiadighikaobi et al. examine the mechanical properties of granite-periwinkle shell (G-PS) concrete confined and not confined in basalt textile (BT), the possibility of achieving lightweight concrete, the durability of the G-PS concrete, and the impact of BT and PS on the construction economy. The study observed that this concrete type is economical and easy to manage in construction and recommended that this type of concrete be implemented in the construction of structural members due to its properties and suitability for the Nigerian environment.

Sistos-Sescosse et al. question how the decision-making process for Building information modeling-life cycle assessment (BIM-LCA) can be improved using a case study on the comparative analyses of specific flooring systems, such as hardwood and nylon-based carpets. The study provides insights for clients and permits approval teams to proactively ensure project environmental sustainability.

The last paper by *Sabet et al.* investigate the innovative simultaneous interactions of building information modeling (BIM) and off-site manufacturing (OSM) in the Australian construction industry. The study concludes that systematically implementing BIM–OSM interactions could improve key productivity indicators and overall project performance.

Finally, I sincerely thank the active community of professionals who have helped the journal over the years. I look forward to working with all of you.

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