Editorial

This special issue features selected papers from the 8th International Conference on Built Environment in Developing Countries (ICBEDC 2024). The 15 papers compiled in this volume present practical solutions and case studies in the built environment, covering topics such as design, risk management, supply chain management, cost management, property assessment, governance, circular economy, total quality management (TQM) in higher education, facility management (FM), indoor environmental quality (IEQ), building information modelling (BIM) and interior design. Contributions from scholars across Asia and the Middle East demonstrate how technology can be effectively integrated with human values to address sustainability challenges.

Muhammad Yusaimi, Rohaya and Nurul Atiqah examine the relationship between environmental, social and governance (ESG) compliance and financial performance among 60 Malaysian listed property companies (2019–2022). Their findings reveal a positive correlation between ESG compliance and profitability, suggesting that companies with stronger ESG practices achieve better financial outcomes. The results provide valuable insights for policymakers, investors and developers in aligning ESG strategies with corporate financial goals.

Samiya, Ernawati and Ilias investigate the implementation of TQM at the University of Technology and Applied Sciences (UTAS). Survey results from seven colleges of technology indicate a significant correlation between TQM practices and the quality of teaching, learning, support services and facilities—apart from customer focus. The findings contribute to a deeper understanding of TQM approaches in higher education institutions.

Xu Haoyuan and Mohd Jaki evaluate product options and colour applications in Chinese museums, using case studies from the Palace Museum, Shanghai Museum and Shaanxi History Museum. Their study reveals a close relationship between local culture and material/colour selection in interior design. Recommendations are provided for integrating regional elements into future museum design processes.

Norsafiah, Siti Balqis, Siti Hamidah, Naziah, Adi Irfan and Wan Norisma explore current trends in learning environments, focusing on the measurement of IEQ in higher education buildings. Their work highlights initiatives to enhance building performance and create more sustainable learning spaces.

Mohammad Mohseni, Ernawati and Amin Akhavan develop a decision tree-based predictive model to classify cost overrun levels using machine learning techniques. The model proves effective in systematically assessing risk

factors and accurately predicting cost overruns, enabling stakeholders to make informed decisions and mitigate risks in project management.

Nur Aisyah, Noor Akmal and Azzri Fazril examine challenges in information delivery within the FM sector. Key issues include integrating Internet of Things (IoT) devices and smart technologies with legacy systems, data security and privacy and information overload. The study suggests that integrating BIM can optimise FM information delivery and decision-making.

Md Maksudul Islam, Lee Yong Siang, Rahimi A. Rahman and Syafizal Shahruddin investigate barriers to circular economy adoption in the Bangladeshi construction industry. Thematic analysis of interviews reveals five main challenges: economic/financial constraints, policy/regulatory issues, skill and capacity gaps, sociocultural barriers and technical obstacles.

Fara Diva Mustapa, Farah Kamilah Zainuddin, Muzani Mustapa and Koh Fung Chieng investigate cost components in Malaysian property development. Through case studies, surveys and interviews, they show how land, hard and soft costs influence housing affordability. Their work promotes transparency in cost management and offers insights to support more equitable and sustainable urban development.

Syafizal Shahruddin, Mohd Khairul Amri Ramly, Rahimi A. Rahman and Shakil Ahmed assess architects' competencies in BIM environments. Five key dimensions are identified—business, process, people, technology and knowledge management—emphasising the importance of human skills in supporting digital transformation and sustainable practices.

Bin Deng, Atasya Osmadi and Yuhan Deng present a digital twin construction risk assessment model (DTCRAM) combining Delphi methods and case studies. The model enhances risk detection and management, helping to minimise delays, cost overruns and safety risks. Their work demonstrates how digital twin technology can improve efficiency, resilience and safety in construction projects.

Asma Senawi, Atasya Osmadi, Siti Fairuz Che Pin and Nor Azalina Yusnita Abdul Rahman conduct an empirical study on the role of relational capital in property tax reassessment performance. Based on surveys of local authority officials, the study shows that relational capital fosters process innovation, which improves reassessment efficiency and effectiveness. A conditional mediation model is proposed, considering council size as a moderating factor.

Shi Yee Wong, Pei Xuan Chin, Wai Wah Low, Sing-Sing Wong and Prescilla Palis examine contractors' perspectives on green supply chain management (GSCM) in Sarawak's construction sector. Findings indicate a low rate of adoption,

with government pressure identified as the most significant external driver of successful implementation.

Zulhadi Sahputra, Dewi Larasati and Aswin Indraprastha develop a documentation model for *Rumoh Aceh* tectonics, a vital aspect of traditional Acehnese architecture. Their study reveals gaps in existing documentation and proposes a systematic approach to capturing and preserving indigenous architectural knowledge, contributing to cultural sustainability.

Zhang Jing, Hasnanywati Hassan, Zalena Abdul Aziz, Khoo Terh Jing and Wen Quan analyse barriers to adopting BIM for historic building conservation. Identified challenges include high implementation costs, limited specialised training and reliance on political/organisational support. The study highlights the need for targeted interventions such as educational programmes and supportive policy frameworks.

Nor Azizah, Fathin Najihah, Nursyahira, Noor Dina, Azmal Sabil, Suhaila and Noorli Ismail propose preservation strategies for the Masjid An Nur in Batu Pahat, Johor, using the building checklist assessment (BCA) methodology. Recommendations include strategic repairs, preservative treatments and innovative techniques to ensure the structural longevity and cultural significance of timber mosques.

Together, these studies offer critical perspectives on built environment challenges and solutions from international scholars. They serve as inspiration for future research and practical applications. The guest editors gratefully acknowledge the contributions of the reviewers, editorial team, publication staff and authors for selecting this journal as the platform for their work.

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