Editorial

I would like to begin my editorial by gratefully acknowledging my predecessors Professor Mustafa Alshawi and Professor Jack Goulding for their devotion to *Construction Innovation* over the past two decades. Their leadership and vision have made the journal one of the most authoritative and successful journals in the field. Professor Alshawi and Professor Goulding will continue contributing to *Construction Innovation* in the capacity of Honorary Advisors to help bring the journal to a new height.

Looking ahead, I am very optimistic about *Construction Innovation* as the industry demands for innovative ideas and solutions to tackle a series of grand challenge topics related to sustainability, productivity, safety, quality, etc. The new editorial team will make every endeavour to uphold the quality of *Construction Innovation* by ensuring the scientific value of research papers and reducing the time required for the peer review process. It is the desire of the editorial team to make *Construction Innovation* more impactful and visible to the research community and the industry for the years to come.

This issue of *Construction Innovation* consists of six papers. The first paper is a guest editorial by Rowlinson which looks into the recent development of building information modelling and integrated project delivery. Through a literature review, the author alluded that the benefits of integrated project delivery can be realised by integrating with building information modelling. Acknowledging the difficulty of assuming a grassroots approach to drive stakeholders working collaboratively towards an implementable integrated project delivery mechanism, Rowlinson recommended that exemplar institutions should lead the way to introduce process change.

Lindgren and Emmitt examine the factors influencing the innovation diffusion process. In this paper, a longitudinal study on the development and construction of timber multi-storey buildings in Sweden was conducted. The findings indicated that innovation would involve risks and uncertainties, and the project-based work method and organisational variety could hinder diffusion. The findings point to reducing the complexity of time multi-storey building through the development and use of standardised solutions, well-defined system and prefabrication. By transferring the knowledge from the actual projects into continuous learning organisation, it would benefit all business activities and help enable diffusion.

Thunberg *et al.* attempt to identify and categorise the common on-site problems and to trace the sources of the identified problems by triangulating the data collected from the literature and semi-structured interviews. From a supply chain management perspective, the on-site problems were classified into four categories, namely, material flows, internal communication, external communication and complexity. The positioning of the identified on-site problems in the supply chain and construction project process was exemplified in the paper. The authors contemplated that many common on-site problems are related to the requirement of becoming supply chain-oriented, and supply chain planning could mitigate these problems.

Dave demonstrates the need to use a business process management approach to improve the processes in a construction company. An action research approach and a case study approach were adopted in this research, and the data collected were then analysed in a process modelling tool, through which the shortcomings related to the



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business process, material procurement process and subcontract handling process were identified and new processes were designed to improve the workflow and communication. The paper takes us through the major steps involved in a structured process improvement exercise. Finally, a longitudinal analysis was performed to uncover the challenges in sustaining such an exercise.

A holistic framework for project risk management was developed by Firmenich to improve the efficiency and effectiveness of project risk management and to increase the cost certainty of projects. The proposed framework is dynamic and customisable in nature, making it possible to accommodate different project-specific circumstances of complex projects. Decision makers are allowed to determine the project risk management steps to be performed, decide the stakeholders to be involved and select the mix of methods to be adopted during the risk management process. Through the framework, the deficiencies of individual risk estimation can be addressed and thereby improve the quality of project risk management decisions.

Heard *et al.* seek to build better relationships with indigenous community in the construction and resource sector in Australia. The study was based on a questionnaire survey and interviews with employees in construction and resource companies. The authors found that communication and flexibility are essential to the success of indigenous engagement and policy decisions. To effectively implement the reconciliation action plans, construction and resource companies should incorporate cultural sensitivities in training; treat indigenous engagement as an intrinsic component of operation in the organisation; and have the senior management of the company to drive the reconciliation strategies.

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