

## Convergence Research into Agile Lean Construction for Major Project Risks Management

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This study describes an ongoing PhD research into a novel technical integration of agile project management (APM) and lean construction (LC) for risks management in major construction project delivery. This study describes four research methods adopted, including systematic literature review to justify the need for the described research, system analysis and design to establish a managerial prototype of agile lean construction (ALC) integrated risk management process map called ALCPM, and questionnaire-based survey and case study to verify the ALCPM prototype. In addition to introducing this research project and the ALCPM prototype, this study describes contemporary issues and challenges in project risk management in connection with ALC. The ALCPM methodology with expected research findings will include a re-engineered process map to achieve the advantages from ALC integration to enhance risks management practice in major construction project delivery. This study will also discuss anticipated outcomes from questionnaire-based survey and case study to verify the ALCPM methodology and to explore its utilization in a scenario-based case study. The described research puts forward a generic ALCPM methodology for risks management in major construction projects. This methodology can inform academic research and professional practices in risks management for construction projects, especially major ones where project performance enhancement against risks is on the agenda. This study puts forward a generic ALCPM methodology to support theoretical development of risks management in construction management. Both research justification and proposed process map described in this study have established the preliminary research with valuable findings to inform further development.

**Keywords:** *Agile Project Management, Construction Management, Lean Construction, Risk Management.*