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Title: KNOWLEDGE SHARING FRAMEWORK FOR SUSTAINABLE VALUE

PLANNING IN MALAYSIAN PUBLIC CONSTRUCTION PROJECTS

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Malaysia is pursuing the status of a high-income nation by the year 2020. In tight economic conditions, the government has to improve the value of public spending through increasing its sustainability with the lowest possible investment. Although construction projects contribute to the country's economic growth and fulfil social needs, they also contribute to environmental deterioration. Besides that, construction projects in Malaysia are criticised for low productivity and failure to achieve client satisfaction. Due to these reasons, the government has introduced the Green Growth concept to promote sustainable development for public projects and Value Management (VM) to improve the projects' value for money. Value Planning (VP) is the front end of VM, conducted during the early project planning stage. Due to various advantages of integrating sustainability considerations during the early stages, VP is the best platform to achieve value for money and project sustainability at the same time. Sustainable Value Planning (SVP) is a concept that integrates both value for money and sustainability targets in a single mechanism. Effective knowledge sharing is the key driver for SVP. Despite the recognition of the importance of effective knowledge sharing within VP, its contribution in nurturing sustainability integration into the practice remains unclear. Thus, this study is conducted with the aim of developing the Knowledge Sharing Framework For Sustainable Value Planning. This framework explains the constructs involved and their relationships during the SVP in the context of knowledge sharing for Malaysian public construction projects. This study was conducted based on the philosophy of pragmatism

and adopted the abductive approach. A two-phase Exploratory-Explanatory research was conducted employing the Mixed-Method Research design. Both quantitative and qualitative data were collected and analysed using various data analysis techniques such as Template Analysis and Partial Least Square of Structured Equation Modelling. This study arrived at a few findings, including: (1) the sustainability themes to be used during SVP; (2) factors that influence knowledge sharing effectiveness during VP; (3) relationship between perceived project sustainability performance and knowledge sharing effectiveness; and (4) The Knowledge Sharing Framework for SVP. Seven constructs were identified that explain the knowledge sharing phenomenon during SVP: (1) individual attitudes towards knowledge sharing; (2) perceived complexity of the knowledge domains (3) subjective norms of sharing knowledge (4) dependency on online repositories; (5) knowledge sharing effectiveness; (6) team synergy; and (7) perceived project sustainability performance. Using questionnaire survey involving the Value Assessment Laboratory participants, the relationships amongst the constructs were tested. The response rate of the survey is 84% and 280 observations were finally analysed. Eight direct relationships and two mediating effects were identified that explain the relationships between these constructs. Based on the findings of this study, effective knowledge sharing significantly influences the sustainability considerations during VP. It also partially mediates the relationship between team synergy and the perceived project sustainability performance.