IT procurement model for construction organizations

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Lack of effective IT exploitation in construction organizations often creates difficulty in justifying future expansion and use of benefits of IT innovations. The problem of identifying best IT products, procurement approaches, costs and benefits are the one of the reasons behind that. It is a global problem experienced in all types of business sectors and organizations (Hochstrasser and Griffiths, 1991). However, the problem is more acute in construction as a result of the industry's structure, fragmentation, and under capitalization. According to Athukorala's (2000) survey on usage of IT in construction industry of Sri Lanka revealed that the usage of IT has not fully embraced and identified the same as problems for less usage of IT in construction industry. This necessitates the development of a tool to evaluate new investments and provide feedback on their probable successes or failures. Therefore, the primary aim of this research project is the development of IT procurement model for the construction organizations. The model will incorporate principles of Value Management (VM). VM is an organized approach to providing the necessary functions at the lowest cost (Kelly and Male, 1987).

In order for the development of the model the research reviewed theoretical considerations and current industry practice in IT procurement. The best practice knowledge from construction procurement was the extracted and synthesized with principles of value management to develop a new approach for IT procurement. The model will now be tested with real life IT procurement scenarios and refined accordingly. The research comprised experienced academics and industry representatives all of whom had direct experience in the IT based systems within construction organizations. The findings of the research confirmed the need for a new approach to the assist IT investments for construction organizations. Moreover, no satisfactory IT procurement method for individual construction organizations was found to exist.

The model has been designed to help users to understand the benefit and drawbacks associated with different procurement methods that can be used procure IT. The model is targeted at the senior management particularly those without proper knowledge of IT procurement, but responsible for procurement of IT. Value Management is the center technique incorporated into the model to identify best value functional requirements, which is the base for selection of best procurement options. The main benefit expected from IT procurement model is the assurance of the best value, cost savings and better performance in the procurement process, which encourage greater investment in IT.

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