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KNOWLEDGE SHARING IN THE MALAYSIAN CONSTRUCTION INDUSTRY

by

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STATEMENT OF ORIGINAL AUTHORSHIP

I hereby certify that the work embodied in this Dissertation Project is the result of original research and has not been submitted for a higher degree to any other University or Institution.

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DEDICATION

This dissertation is dedicated to my late father and my mother, both of whom persevered to provide me with a good education.

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ABSTRACT

The fragmented nature of the construction industry leads to poor sharing of knowledge between the designers and constructors of projects. Most construction problems arise because of deficiencies in the design. More often than not, these problems are left to the constructors to solve at the site. However, the knowledge gained by the constructors in solving these problems is unlikely to be shared with the designers in such a way that the same design deficiencies will be avoided in future projects.

Effective knowledge sharing contributes towards improving the designer construction knowledge. There are a number of design-construction interfaces in construction projects, during which information exchange and knowledge sharing could take place between designers and contractors. This information exchange and knowledge sharing will help to overcome the design deficiencies as well as problems during construction attributed to these deficiencies.

Construction project and organizational knowledge that are crucial to the designers and Knowledge Management tools for locating and sharing project knowledge are identified. This research used responses from forty-two (42) respondents to test the relationships between the application of knowledge sharing tools and the improvement of designer construction knowledge, with respect to the crucial construction project and organizational knowledge areas identified in the Malaysian construction industry. At the same time, the frequencies with which the sharing of construction knowledge between designers and constructors occurs through the various approaches were compared.

The results of the analysis confirmed positive relationships between the application of all the knowledge-sharing approaches (except brainstorming)

and the designer construction knowledge. The positive relationships between the variables for the non-IT knowledge sharing tools support the findings of studies carried out by earlier researchers which suggest that in the construction industry, knowledge sharing and learning depend heavily on the informal social processes and practices that lean towards a community approach.

However, whilst respondents in this study perceive that there is a positive relationship between applying the IT based knowledge sharing tools and the improvement of designer construction knowledge, studies by various other researchers indicate otherwise, in which it was concluded that the ICT-based approach to sharing of project knowledge has not been very effective.

The rankings for the choice of knowledge sharing tools indicate a similar pattern as those arrived at in a UK study except for research collaboration.