UNIVERSITI TEKNOLOGI MARA

A STUDY ON CRITICAL SUCCESS FACTORS IN AGILE PROJECT MANAGEMENT

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Thesis submitted in fulfillment of the requirements for the degree of Master of Science of Information Technology

Faculty of Computer and Mathematical Sciences

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AUTHOR'S DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulations stipulated by Universiti Teknologi MARA (UiTM). It is original and is the result of my own work, unless otherwise indicated or acknowledged as referenced work. I declare that this thesis has not been submitted to any other academic or non-academic institution for any other degree or qualification.

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ABSTRACT

In this information age, the demands of having advanced updated technologies had urged Malaysia to become one of the countries that take advantage on the agile development methodologies to its IT projects implementation. Due to fast pace delivery of deliverable with extremely volatile requirement of project with the adoption of agile approach, thus there must be a set of critical success factors that serves as the guiding principles to a successful project implementation. However, past research of agile project management showed few study in this field is conducted especially that focus on best practice of the agile project management in Malaysia. Thus, this qualitative research is undertaken to investigate the success factor of agile project implementation in Malaysian local settings. The focus group of the interview is the agile practitioners from five organizations namely MAMPU, Y US Sdn.Bhd., Accenture Solution Sdn.Bhd., E5000 Systems Sdn.Bhd. and Malaysia Airline Systems (MAS). There are eight characteristics of critical success factors identified from literature review which then constructed a conceptual framework that grounded this study namely top management support, organizational environment, team environment, team capability, customer involvement, delivery strategy and project management process. Furthermore, two additional success factors identified through interview which are documentation management and people management which is then applied to be part of the conceptual framework. The success factors identified from respondents' experience of managing agile project is prioritize according to its importance and is then consolidated into the critical success factors characteristics for the purpose of application into Wysocki's INSPIRE Project Management Model. To name one of most important success factor identified is the proper change management which is related to critical success factors characteristic of project management process identified by Chow & Cao. Finally the application of critical success factors into the Wysocki's INSPIRE Project Management Model is performed to demonstrate which critical success factors that is workable in each phases of the development model. As a conclusion, the objectives of the study are realized with the identification of the tools and techniques as well as the application of the critical success factors into Wysocki's project management model.

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