

UNIVERSITI TEKNOLOGI MARA

**RISK MANAGEMENT
IN INFORMATION TECHNOLOGY
OUTSOURCING FRAMEWORK IN MALAYSIA**

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**Thesis submitted in fulfillment of the requirements
for the degree of
Doctor of Philosophy**

Faculty of Computer and Mathematical Sciences

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Candidate's Declaration

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

In the event that my thesis be found to violate the conditions mentioned above, I voluntarily waive the right of conferment of my degree and agree be subjected to the disciplinary rules and regulations of Universiti Teknologi MARA.

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ABSTRACT

Outsourcing is becoming a trend nowadays. Malaysia also takes this opportunity and embraces in IT outsourcing. As a result, Malaysia has been ranked as the third most attractive destination for outsourcing after India and China. Despite increasing number of organisations that involve in IT outsourcing, it should be noted that IT outsourcing is not a panacea. It requires effective management in order to prevent projects from failing. This problem has also been reported to happen with the IT outsourcing projects in Malaysia. It is essential to identify, manage and mitigate the risk inherent in IT outsourcing projects. Hence, this research would focus on managing risk in IT outsourcing projects that would be applied in Malaysian environment. There are two research models used in this study. Research Model 1 is to investigate the factors that influenced the practice of risk management in IT outsourcing phase, evaluation on how organisations practised risk management in IT outsourcing project, identification of success rate and relationship between risk management in IT outsourcing phases and IT outsourcing success. Meanwhile, Research Model 2 determines the ranking of risk factors as assessed by managers in Malaysia. There were 38 risk factors used in this study and managers' perception towards those risks was then measured. The new risk factors as envisioned by the managers were also identified. Results from quantitative study revealed that only 35.6% IT outsourcing projects managed to be delivered successfully. The study revealed that 28.9% of the project success belongs to organisations that practise risk management. The results show that the success of IT outsourcing depends heavily on risk management in IT outsourcing phases. The top three risk factors are service provider's practices of security, service provider's financial condition and monitoring of the project. The survey also revealed that the project with different type of business nature perceived risk factors differently from each other. The qualitative survey showed the new risk factors as envisioned by managers. The factors are type of contract, proposal returned and project usability. The best practices from previous literatures and the findings were then used as a basis for the development of the framework. The framework proposed step-by-step guidelines that need to be taken in managing risk in IT outsourcing projects. The framework could help the organisations to focus on risk management practices while managing IT projects. To present the usability of the framework, it has been tested on a case study. Based on the case study, the organisation had skipped the selection of service provider phase. As a consequence, the organisation faced many problems including the service provider's inability to solve problems. The application of the framework however has allowed them to select service provider with the required knowledge and skills. Furthermore, the framework allows the organisation to focus on initial study in decision to outsource, develop and sustain relationship with its service provider, manage the contract as well as monitor the service provider in order to reduce risk thus, increase the probability of project success.

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