



**UNIVERSITI PUTRA MALAYSIA**

**FACTORS INFLUENCING ENTERPRISE RESOURCE PLANNING (ERP)  
ADOPTION AND ITS EFFECT ON ORGANIZATIONAL PERFORMANCE**

**SAIRA BINTI KHARUDDIN**

**GSM 2012 2**

**FACTORS INFLUENCING ENTERPRISE RESOURCE PLANNING (ERP)  
ADOPTION AND ITS EFFECT ON ORGANIZATIONAL PERFORMANCE**



**By  
SAIRA BINTI KHARUDDIN**

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**September 2011**

**Chairman: Professor Dr. Foong Soon Yau**

**Faculty: Graduate School of Management**

Enterprise Resource Planning system (ERP) is a highly integrated and coordinated system that enables an organization not only to enhance its operational efficiency but also improve its market responsiveness and innovativeness. However, ERP adoption does not guarantee increase in organizational performance. In response to the increasing needs to identify causes for ERP adoption failure, this study examines factors that influence ERP system adoption decision and effect of ERP adoption on organizational performance. The mediating roles of users' satisfaction and system usage on the relationship between ERP system adoption and organizational performance are also examined. The economic transaction cost theory and the institutional theory are the underlying theories used to explain factors that impact ERP system adoption. The DeLone and McLean performance model was adopted to

analyze the impact of users' satisfaction and system usage on the relationship between ERP adoption and organizational performance.

In conducting this study, data were collected through a questionnaire survey of all companies listed in Bursa Malaysia, as well as 200 companies systematically selected from the Federation of Malaysian Manufacturers (FMM) database. Responses from 136 organizations were analyzed. The results indicate that perceived operational benefits, perceived strategic benefits and mimetic pressure have significant influence on ERP system adoption decision. However, managerial benefits, normative pressure and coercive pressure are not significant in the ERP adoption decision deliberation. As hypothesized, ERP adoption has a significant and positive relationship with organizational performance. The results also show that only system usage mediates the relationship between ERP adoption and organizational performance. The result of this study suggest that careful evaluation and justification processes are appropriately undertaken as evidenced by the significant emphasis on both operational benefits and strategical benefits prior to the adoption of ERP system. The significant effect of mimetic pressure on ERP adoption further indicates that organizations are keen to be at par with their competitors' technological capabilities. In addition, organizations also need to promote effective usage of ERP system to ensure improvement in organizational performance could be attained.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi sebahagian keperluan untuk ijazah Master Sains

**FAKTOR-FAKTOR YANG MEMPENGARUHI PENERIMAAN SISTEM  
PERANCANGAN SUMBER PERUSAHAAN DAN KESANNYA KEATAS  
PRESTASI ORGANISASI**

Oleh

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September 2011

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Enterprise Resource Planning (ERP) atau Sistem Perancangan Sumber Perusahaan adalah sebuah sistem berintegrasi dan berkoordinasi tinggi, yang bukan sahaja membolehkan organisasi untuk meningkatkan kadar kecekapan, malah berupaya meningkatkan kebolehan organisasi untuk bertindak cepat dalam menangani perubahan pasaran dan menjadi lebih berinovasi. Walaubagaimanapun, penggunaan ERP tidak dapat sepenuhnya menjamin peningkatan prestasi organisasi. Sebagai respon kepada peningkatan dalam keperluan untuk mengenalpasti punca-punca kegagalan sistem ERP, kajian ini menganalisis faktor-faktor yang mempengaruhi keputusan untuk menerima system ERP dan kesan penerimaan ERP ke atas prestasi organisasi. Peranan kepuasan pengguna dan penggunaan sistem sebagai perantara didalam hubungan diantara penerimaan sistem ERP dan prestasi organisasi juga dianalisis. Teori kos urus-niaga berasaskan ekonomi dan teori institusi adalah teori-teori yang digunakan untuk menjelaskan faktor-faktor yang boleh memberi kesan

dalam penerimaan sistem ERP. Model prestasi DeLone and McLean digunakan untuk menganalisis impak kepuasan pengguna dan penggunaan sistem didalam hubungan diantara penerimaan ERP dan prestasi organisasi.

Bagi melaksanakan kajian ini, data diperolehi melalui kajian soal-selidik yang telah dihantar kepada semua organisasi yang disenaraikan dalam Bursa Malaysia dan juga kepada 200 organisasi yang telah dipilih secara sistematik daripada senarai yang terdapat didalam pangkalan data Persekutuan Pekilang-Pekilang Malaysia (FMM). Respon daripada 136 organisasi telah dianalisis. Keputusan menunjukkan bahawa faedah-faedah operasi dan strategik, dan tekanan ajukan (mimetic) mempunyai pengaruh signifikan didalam keputusan untuk menerima sistem ERP. Walaubagaimanapun, faedah-faedah pengurusan, tekanan normatif (normative) dan tekanan paksaan (coercive) tidak signifikan dalam perbincangan untuk menerima sistem ERP. Seperti andaian hipotesis, penerimaan sistem ERP menunjukkan hubungan yang positif dan signifikan dengan prestasi organisasi. Keputusan juga menunjukkan hanya penggunaan sistem merupakan perantara didalam hubungan diantara penerimaan ERP dan prestasi organisasi. Berdasarkan fakta analisis yang menunjukkan penekanan signifikan keatas kedua-dua faedah operasi dan strategic, hasil kajian ini menunjukkan bahawa perancangan dan proses justifikasi yang teliti telah dilakukan dengan sewajarnya sebelum keputusan untuk menerima sistem ERP dilakukan, Kesan signifikan tekanan ajukan dalam penerimaan system ERP juga menunjukkan kepentingan sesebuah organisasi untuk menjadi setaraf dengan keupayaan teknologi pesaing-pesaing mereka. Tambahan lagi, organisasi juga perlu menggalakkan penggunaan sistem ERP yang lebih efektif bagi menjamin peningkatan prestasi organisasi dapat dicapai.

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I certify that a Thesis Examination Committee met on 12<sup>th</sup> February 2012 to conduct the final examination of **Saira Binti Kharuddin** on her **Master of Science** thesis entitled '**Factors Of Enterprise Resource Planning (ERP) Adoption And Its Effect On Organizational Performance**' in accordance with the Universities and University Colleges act 1971 and the Constitution of the Universiti Putra Malaysia [P.U.(A)106] 15 March 1998. The committee recommends that the candidate be awarded the Degree of Master Science (Accounting).

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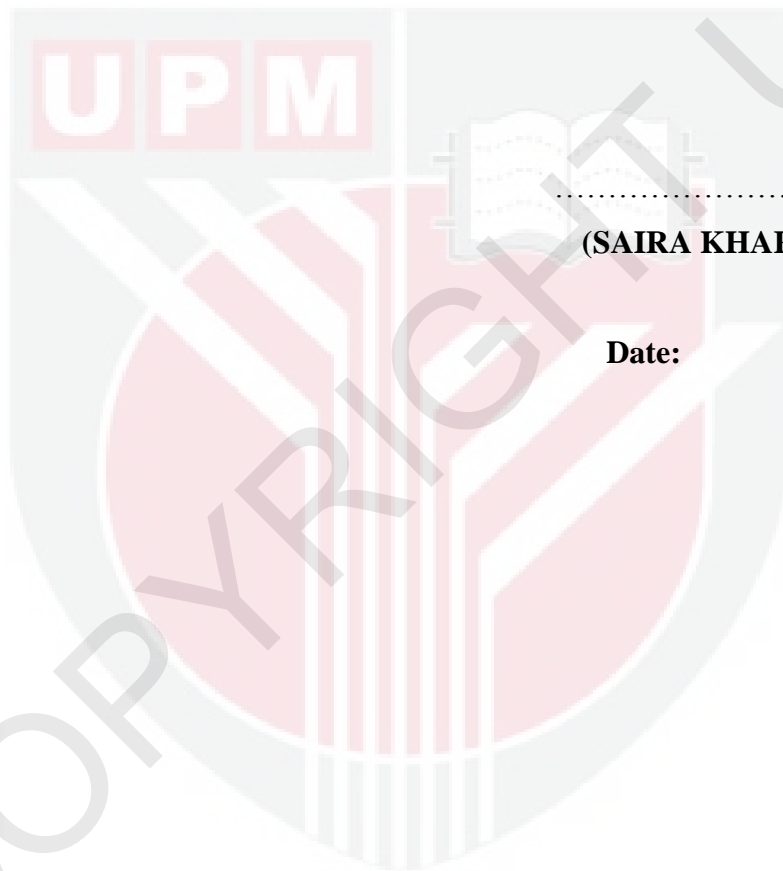
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## DECLARATION

I hereby declare that the thesis is based on my original work except for quotations and citations, which have been duly acknowledged. I also declare that it has not been previously or currently submitted for any other degree at UPM or other institutions.



.....  
(SAIRA KHARUDDIN)

**Date:**

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