



UNIVERSITI PUTRA MALAYSIA

**INFLUENCE OF CITIZEN-CENTRIC PERSPECTIVE ON THE
EFFECTIVENESS OF E-GOVERNANCE SYSTEMS IN MALAYSIA**

SEYED MOHAMMADBAGHER JAFARI

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IN MALAYSIA**

By

SEYED MOHAMMADBAGHER JAFARI

**Thesis submitted to the Graduate School of Management,
Universiti Putra Malaysia, in Fulfillment of the
Requirements for the Degree of Doctor of Philosophy**

July 2012

In dedication to:

My beloved wife Somayeh Sadat,
and my lovely son Seyed AmirAli

For all their encouragement, patience and support

With love and gratitude



Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfillment
of the requirement for the degree of Doctor of Philosophy

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Chair: Associate Professor Noor Azman Ali, PhD

Faculty: Graduate School of Management

The rapid evolution of information and communication technologies (ICTs) has created challenges and opportunities for governments all over the world. Nowadays, many citizens are turning to electronic communities. On the other hand, the government costs too much, delivers too little, and is not sufficiently responsive or accountable. These are the push factors for every government to improve its relationship with citizens via advanced technologies. Today, e-government and e-governance are key issues on the agenda of various governments across the world. However, the effectiveness of e-governance systems is contingent upon designing these systems based on citizens' values and needs. Nevertheless, the actual needs, values and objectives of citizens receive minor consideration in current e-governance literature. The current approach in e-governance design is more top-down view, techno-centric and focuses on efficiency (output). There is a strong need for change in e-governance design practice from top-down to bottom-up design. The new approach should be citizen-centric and focuses on effectiveness (outcome, impact) of the systems. Based on this perspective, the citizens' needs and values on

e-governance have to be put first to make these systems effective. This study is an attempt to explore and propose the needs and values of citizens on e-governance systems based on the determinants of information system (IS) success in the DeLone and McLean 2003 (D&M 2003) model of IS success. After conducting a systematic and comprehensive literature review, this study identified new determinants of e-governance success and proposed the citizen-centric e-governance effectiveness model. Using a survey method, 356 valid questionnaires were collected from Malaysian citizens with prior experience on government online services. The structural equation modeling (SEM) technique has been used to evaluate the hypothesized model. The results stress the special importance of information quality, system quality (ease of use, presentation and functionality), service quality-citizen relationship management and public trust in determining citizens' intention to use e-governance systems and their satisfaction with these systems. Moreover, the importance roles of service quality-security and policy environment and regulation as the antecedents of public trust in e-governance systems have been determined. The results also show that access to ICT has a mediating effect between intention to use and the actual use of e-governance systems by the citizens. In addition, the findings highlight the influential roles of actual use and citizens' satisfaction with e-governance systems on their perceived net benefit from these systems. The empirical examination shows that the proposed model has high predictive power on the intention to use, the actual use and satisfaction with e-governance systems by citizens. This study adds to the body of knowledge on citizen-centric e-governance systems. Moreover, it sheds some new insights into D&M 2003 IS success model in e-governance context by finding the factors that represents the citizens' needs and values on these systems and proposing a respecified and extended model. This

model gives a better understanding on the multidimensional and interdependent nature of citizens-centric e-governance systems success and demonstrates the dynamics of the relationships among the important constructs determining the effectiveness of these systems. With this understanding, governments, system developers and practitioners are in a better position not only to identify the needs and values of citizens toward e-governance systems but also to focus on the effectiveness in order to improve the overall success of e-governance systems.



Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi syarat untuk ijazah Doktor Falsafah

**TERHADAP PENGARUH PERSPEKTIF BERPUSATKAN RAKYAT KE
ATAS KEBERKESANAN SISTEM E-TADBIR URUS
DI MALAYSIA**

Oleh

SEYED MOHAMMADBAGHER JAFARI

Julai 2012

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Evolusi yang pesat ke atas teknologi maklumat dan komunikasi (ICT) telah mewujudkan cabaran dan peluang bagi kerajaan di seluruh dunia. Kini, kebanyakan rakyat telah berubah kepada komuniti elektronik, namun, kerajaan dengan perbelanjaan yang bertambah, pelaksanaannya kurang berkesan dan tidak responsif sepenuhnya atau bertanggungjawab. Faktor-faktor ini merupakan faktor daya tolak pihak kerajaan untuk memperbaiki hubungannya dengan rakyat melalui kemajuan teknologi terkini. Hari ini, e-kerajaan dan e-tadbir urus merupakan isu penting dalam agenda pelbagai pentadbiran kerajaan di merata dunia. Walau bagaimanapun, keberkesanan sistem e-tadbir urus merupakan tuntutan semasa mereka bentuk sistem ini berdasarkan nilai dan keperluan rakyat. Meskipun begitu, keperluan, nilai dan objektif sebenar rakyat mendapat perhatian yang minor dalam sorotan kajian semasa tentang e-tadbir urus. Pendekatan semasa dalam reka bentuk e-tadbir urus ialah pandangan atas bawah, teknosentrik dan berfokuskan kecekapan (output). Terdapat keperluan yang kuat terhadap perubahan dalam amalan reka bentuk e-tadbir urus dari atas ke bawah kepada reka bentuk bawah ke atas. Pendekatan yang

baharu harus berpusatkan rakyat dan fokus haruslah diberikan kepada keberkesanan (hasil, impak) sistem tersebut. Berdasarkan perspektif ini, keperluan dan nilai rakyat terhadap e-tadbir urus haruslah diberikan perhatian dan diambil kira terlebih dahulu supaya sistem ini berkesan. Kajian ini merupakan cubaan untuk mengeksplor dan mencadangkan keperluan dan nilai rakyat terhadap sistem e-tadbir urus berdasarkan determinan sukses sistem maklumat (IS) model sukses Delone dan McLean (D&M 2003). Setelah menjalankan sorotan kajian yang sistematik dan komprehensif, kajian ini mengenal pasti determinan baru tentang sukses e-tadbir urus dan mencadangkan model keberkesanan e-tadbir urus berpusatkan rakyat. Dengan menggunakan kaedah tinjauan, 356 soal selidik yang sah telah dikumpulkan daripada rakyat Malaysia yang mempunyai pengalaman dengan perkhidmatan atas talian kerajaan. Teknik pemodelan persamaan struktur telah digunakan untuk menilai model yang berhipotesis. Keputusan kajian menekankan kepentingan khusus terhadap kualiti maklumat, kualiti sistem (mesra digunakan, persembahan dan keberfungsian), pengurusan hubungan perkhidmatan kualiti rakyat dan kepercayaan publik dalam menentukan hasrat rakyat untuk menggunakan sistem e-tadbir urus dan kepuasan rakyat terhadap sistem tersebut. Di samping itu, kepentingan peranan perkhidmatan kualiti keselamatan dan polisi dan peraturan alam sekitar sebagai anteseden kepercayaan publik terhadap sistem e-tadbir urus telah dikenal pasti. Hasil kajian juga menunjukkan bahawa akses kepada ICT mempunyai kesan pengantara antara hasrat untuk menggunakannya dan penggunaan sebenar sistem e-tadbir urus oleh rakyat. Tambahan pula, dapatan mengetengahkan peranan berpengaruh terhadap penggunaan sebenar dan kepuasan rakyat terhadap sistem e-tadbir urus ke atas faedah bersih yang dijangkakan daripada sistem tersebut. Pemerhatian empirikal menunjukkan bahawa model yang dicadangkan mempunyai kuasa prediktif yang

tinggi terhadap hasrat untuk menggunakan, penggunaan sebenar dan kepuasan ke atas sistem e-tadbir urus oleh rakyat. Kajian ini juga berupaya untuk menambah sejumlah ilmu pengetahuan terhadap sistem e-tadbir urus. Lebih-lebih lagi, kajian ini meneroka beberapa pemahaman baru terhadap D&M 2003 model sukses IS dalam konteks e-tadbir urus dengan mencari faktor yang dapat mewakili kehendak dan nilai rakyat terhadap sistem tersebut dan mencadangkan model yang ditentukan semula dan yang diperluaskan. Model ini memberikan pemahaman yang lebih baik terhadap sifat multidimensional dan kesalingbergantungan sistem sukses e-tadbir urus berpusatkan rakyat dan menerangkan kedinamikan hubungan antara konstruk penting yang menentukan keberkesanan sistem tersebut. Dengan pemahaman tersebut, kerajaan, pembina sistem dan pengamal, bukan sahaja lebih berupaya untuk mengenal pasti kehendak dan nilai rakyat terhadap sistem e-tadbir urus, malah dapat memberikan fokus terhadap keberkesanannya supaya dapat menambah baik kejayaan sistem e-tadbir urus secara menyeluruh.

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I certify that a Thesis Examination Committee has met on **09 July 2012** to conduct the final examination of Seyed Mohammadbagher Jafari on his thesis entitled “**Influence of Citizen-centric Perspective on the Effectiveness of e-Governance Systems in Malaysia**” 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 Doctor of Philosophy.

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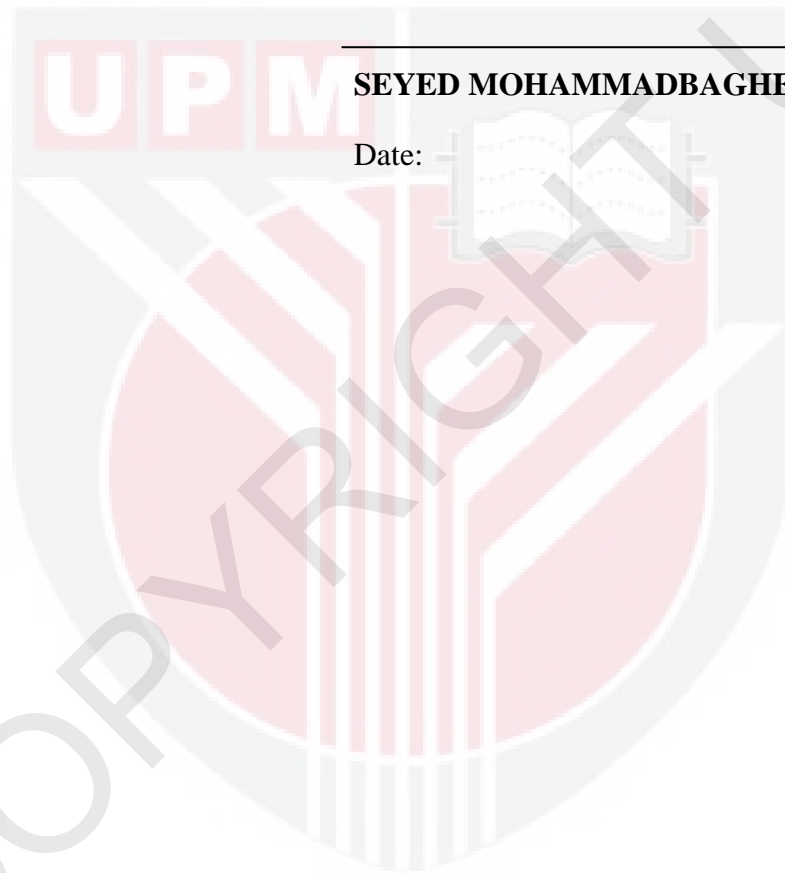
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DECLARATION

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 concurrently submitted for any other degree at Universiti Putra Malaysia or any other institution.



SEYED MOHAMMADBAGHER JAFARI

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