

E-GOVERNMENT SERVICE MODEL IN IMPROVING E-SERVICES FOR  
MINISTRY OF HIGHER EDUCATION AND SCIENTIFIC RESEARCH IN  
YEMEN

BASHEER MOHAMMED MOHAMMED AL-HAIMI

UNIVERSITI TEKNOLOGI MALAYSIA

E-GOVERNMENT SERVICE MODELIN IMPROVING E-SERVICES FOR  
MINISTRY OF HIGHER EDUCATION AND SCIENTIFIC RESEARCH IN  
YEMEN

BASHEER MOHAMMED MOHAMED AL-HAIMI

A dissertation submitted in partial fulfillment of the  
requirements for the award of the degree of  
Master of Science (Information Technology-Management)

Faculty of Computing  
UniversitiTeknologi Malaysia

JUNE 2013

To my beloved mother, father, my brothers and sisters

## ACKNOWLEDGMENT

I would never have been able to finish my dissertation without the guidance and blessings of Allah the Almighty who enables me to finish this dissertation on time.

I would like to express my deepest gratitude to my supervisor, Dr. Halina MohamedDahlan, for her excellent guidance, caring, patience, and encouragements for doing this research.

I would also like to thank MrMokhtarAlmamari, the financial counselor in the Cultural attaché of Yemen in Malaysia for all the facilities and support. A special thank goes to Dr. Adnan Alsnway, who was encouraging me to finish my postgraduate study.

I would like to thank MrAimanAlbana, the staff of Ministry of Higher Education who let me experience the research and was always available to answer any questions related to this research.

I would like to thank Miss Nizamra and Miss Lijah, the staff of postgraduate students department for their unlimited help and patience. Manythanks to all financial units' staff especially Mr Jeffry bin Selamat for his kind dealing and patience. My research would not have been possible without their helps.

Finally, I would like to thank my family and my wife for their best wishes and encouragements.

## ABSTRACT

Information and Communication Technology (ICT) is considered as one of the most important aspects of today's world. The evolution of new technologies has dramatically changed the way that people interact with their governments in a very easy and transparent way. Electronic government, or e-Government, enables the organizations to provide better daily services to the clients. Nowadays, governments are measured by their citizens' satisfaction and understanding of the citizens' need is very important to improve that satisfaction that result to repetitive visit. Yemeni government, as an example, is trying to keep pace with the developed countries in various fields. Yemeni government, nowadays, is facing a lot of challenges as to providing daily civil services electronically is of a major challenge. Based on the findings from another researcher, Yemen has got low points on online services index. There are various e-government service models have been reviewed by researcher, but the most appropriate e-government service models are selected based on the requirements. A field study at Ministry of Higher Education and Scientific Research (MoHESR) was used to collect the requirements. Requirements have been gained via three methods as interview, questionnaire and MoHESR website analysis. The results are used for mapping the proposed requirements of e-government services implementation of MoHESR and existing e-government service model of SAFAD. Basing on the results gathered from the field, the research recommends that the new proposed e-government service model for MoHESR should address the dimensions of new interesting multi-language website, Simple services to interact with website, several specific online services and integrate the services with other agencies under MoHESR. The model was evaluated in questionnaire based field study.

## ABSTRAK

Teknologi Maklumat dan Komunikasi (ICT) dianggap sebagai salah satu aspek yang paling penting dalam dunia hari ini. Evolusi teknologi baru telah mengubah secara dramatik cara orang ramai berinteraksi dengan kerajaan-kerajaan mereka melalui cara yang sangat mudah dan telus. Kerajaan elektronik, atau e-Kerajaan, membolehkan organisasi untuk menyediakan perkhidmatan harian yang lebih baik kepada pelanggan. Kini, kerajaan diukur melalui tahap kepuasan dan kefahaman rakyat kerana keperluan adalah sangat penting bagi meningkatkan kepuasan untuk menghasilkan lawatan berulang. Kerajaan Yaman, sebagai contoh, cuba untuk bersaing dengan negara-negara maju dalam pelbagai bidang. Kerajaan Yaman, pada masa ini, menghadapi cabaran besar untuk menyediakan perkhidmatan awam harian elektronik. Berdasarkan data dan kajian yang lain, Yemen telah mendapat mata rendah pada indeks perkhidmatan dalam talian. Terdapat model pelbagai perkhidmatan e-kerajaan telah dikaji oleh penyelidik, tetapi model perkhidmatan e-kerajaan yang paling sesuai dipilih berdasarkan keperluan. Satu kajian bidang di Kementerian Pengajian Tinggi dan Penyelidikan Saintifik (MoHESR) telah digunakan untuk mengumpul keperluan. Keperluan telah diperoleh melalui tiga kaedah seperti temubual, soal selidik dan MoHESR analisis laman web. Maklumat tersebut juga digunakan untuk pemetaan keperluan cadangan pelaksanaan perkhidmatan e-kerajaan MoHESR dan model SAFAD. Berdasarkan kepada keputusan yang diperoleh dari padang, penyelidikan mencadangkan bahawa model baru yang dicadangkan e-kerajaan perkhidmatan untuk MoHESR perlu menanganidimensi laman web multi-bahas baru yang menarik, perkhidmatan yang mudah untuk berinteraksi dengan laman web, beberapa perkhidmatan dalam talian yang

khusus dan mengintegrasikan perkhidmatan dengan agensi-agensi lain di bawah MoHESR. Model ini telah dinilai dalam soal selidik berasaskan kajian lapangan.