REQUIREMENTS FOR REDESIGNING THE INTERFACE OF IRAQI E-GOVERNMENT PORTAL

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REQUIREMENTS FOR REDESIGNING THE INTERFACE OF IRAQI E-GOVERNMENT PORTAL

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Abstrak

Kebanyakan negara telah menyediakan perkhidmatan kerajaan secara atas talian. Namun, Iraq masih mencari peluang baru menuju ke arah perkhidmatan atas talian tersebut. Inisiatif bagi menceburi perkhidmatan kerajaan atas talian atau disebut kerajaan elektronik (e-kerajaan) tidak menunjukkan hasil yang memuaskan. Walaupun e-kerajaan telah tersedia, pelanggan masih memilih kaedah tradisional, atau memasuki sistem atas talian melalui laluan yang tidak diiktiraf. Melalui cara tersebut, pelanggan dianggap tidak menggunakan portal e-kerajaan. Beberapa faktor telah dikenalpasti sebagai pengaruh kepada kelemahan portal e-government sedia ada; di mana reka bentuk paparan hadapan bagi portal adalah salah satu dari faktor yang menyebabkan pengguna tidak tertarik untuk melayari portal melalui laluan yang sempurna, iaitu melalui muka hadapan yang diiktiraf dan selamat. Sebaliknya, pengguna terus mencapai modul yang diingini melalui laluan pintas. Dengan itu, kajian ini meyimpulkan bahawa tahap 'mudah' rekabentuk interaksi pada paparan muka hadapan portal e-kerajaan sedia ada adalah lemah dan tidak menyokong pengalaman pengguna. Usaha menjawab persoalan-persoalan tersebut memerlukan kajian ini mencadang satu set elemen bagi portal e-kerajaan Iraq bagi memastikan ia diterima baik sebagai berguna dan mudah digunakan. Kajian ini menamakan prototaip yang menerapkan elemen yang diperoleh dan disyorkan sebagai Iraqi e-government portal (Ie-gP). Sehubungan itu, matlamat kajian ini adalah ditetapkan untuk mengusulkan satu set elemen yang membuatkan Ie-gP berguna dari persepsi pengguna. Bagi menyempurnakan matlamat tersebut, tiga objektif telah dirangka: (1) menentukan elemen antara muka bagi halaman hadapan (front office) Ie-gP, (2) untuk mereka bentuk dan membangunkan front office bagi Ie-gP, dan (3) untuk menilai tahap kebergunaan dan mudah menggunakan front office Ie-gP. Analisis perbandingan, pembangunan prototaip, dan kajian eksperimental telah dijalankan bagi mencapai matlamat kajian. Dapatan umum menunjukkan bahawa Ie-gP telah mendapat persepsi yang baik dari pengguna terhadap aspek kebergunaan dan tahap mudah untuk digunakan. Justeru, sumbangan kajian yang utama adalah elemen yang menjadikan front office bagi Ie-gP mendapat persepsi yang baik dari pengguna dan prototaip yang dibangunkan.

Abstract

Many countries have provided their government services to the people online. However, Iraq is still looking for opportunities to implement the online technology for their government services. The initiatives to venture into online government services, or called electronic government (e-government) have not shown good return. Although the e-government is available, people still prefer to work on traditional way, or enter into the e-government modules through improper channels. Hence, they are viewed as not using the e-government portal. Many factors were identified influencing the disadvantages of the existing e-government portal; nevertheless the design of the front office is not making users attracted to enter into the portal through the proper home page. In contrast, the users tend to go directly to the module they intend to. Hence, his study deduces that the user interface of the front office of the portal was not usable, not supporting user experience. This study proposes a set of elements for the Iraqi e-government portal to ensure that it is perceived usable in terms of usefulness and ease-of-use. This study develops the prototype that incorporates the elements as Iraqi e-government portal (Ie-gP). Therefore, the aim of the study is to propose a set of elements that make the Ie-gP usable from users' perception. To accomplish that, three specific objectives are formulated: (1) to determine the interface elements for the front office of Ie-gP, (2) to design and develop the front office of Ie-gP, and (3) to evaluate the ease-of-use of the front office of Ie-gP. Comparative analysis, prototyping, and experimental studies are used to accomplish the objectives and aim. General findings show that Ie-gP is perceived useful and easy-to-use. The main contributions of this study are the elements of usable e-government portals for Iraqi context and the prototype of the usable portal called Ie-gP.

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List of Abbreviations

Ie-gP	Iraqi E-government Portal
ICT	Information and Communications Technology
IT	Information Technology
GIP	Government Information Portal
E-SERVICES	Electronic Services
MOU	Memorandum of Understanding
MOI	Ministry of Interior
MMPW	Ministry of Municipalities and Public Works
UN	United Nations
MMS	Multimedia Messaging Service
3G	Third Generation
GPRS	General Packet Radio Service
G2C	Government-To-Citizen
G2G	Government-To- Government
G2B	Government-To-Business
G2E	Government-To-Staff
EG	E-Government
UML	Unified Modelling Language
GUL	Graphic User Interface
HTTP	Hypertext Transfer Protocol
HTTPS	Hypertext Transfer Protocol Secure
UTF-8	Unicode From Universal Character Set + Transformation Format -8 Bit
MB	Megabyte
DIT	Department of Information Technology

HTML	Hypertext Mark-up Language
IEEE	Institute of Electrical and Electronics Engineers
AVI	Audio Video Interleaved

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CHAPTER ONE
INTRODUCTION

1.1 Introduction

This chapter explains the e-government in general and the services provided through the Internet. It also provides the definitions of front office of e-government portal. Besides, it discusses the background and current state of e-government portal in Iraq.

1.1.1 E-government

E-government has become one of the essential foundations in recent modern society (Alfawwaz, 2011). It represents an important part in economic, social, and political development of the country (Al-Taie & Kadry, 2013). As part of Information and Communication Technology (lCT) infrastructure, it assists in knowing the aspiration of the government as well as offering various services (Al-Khafaji, Shittuline & Osman, 2012). This allows various transactions to be available online, which is referred to as e-government. The e-government portal is composed of two parts, front and back office; particularly, the front office serves the clients, while the back office functions to deal with records (Durickovic & Kovacevic, 2011).

1.1.2 Front Office

The front office, as it connects the system and the users need to be user-friendly. It should support users' tasks at its best, well-tailored to the needs of the users, appropriate to the context of use and the environment, as well as be aesthetic to the users (Sharp, Rogers & Preece, 2007). Based on that, it should serve as an online service center and citizen engagement tool at the same time (Abdulwahida, Mutalib, Affendi, Yusof & Alib, 2014; Cook, 2000; Thomas & Streib, 2003).

The contents of the thesis is for internal user only

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