A PRACTICAL APPROACH FOR USER INTERFACE DESIGN OF A G2B BASED OFFICIAL DOCUMENT EXCHANGE SYSTEM IN TAIWAN

KUO-WEI SU[1], HUNG-YI CHANG[1] AND KUO-CHUAN WANG[2]

[1]Department of Information Management
National Kaohsiung First University of Science and Technology
No. 2, Jhouyue Rd., Nanzih District, Kaohsiung City 811, Taiwan
{ kwsu; leorean }@nkfust.edu.tw

[2]Inventec Appliances
New Taipei City 248, Taiwan
brain1@ms50.url.com.tw

ABSTRACT. *Recently, Taiwan government has been devoted to developing e-document systems, with the aim of building channels between the government and business companies. However, some researches have indicated that the document exchange system is not efficient. The main reason for this is that bad designs confuse their users. Therefore, it is essential to research existing literature for redesigning the current system. In this paper, we design a new user interface for the document exchange system by using the human-centered design (HCD) process and the information interface design guidelines. To show the effectiveness of our proposed interface, objective and subjective assessments are conducted. The analysis results demonstrate the significant learnability and efficiency of our new interface design.*

Keywords: E-government, E-document systems, Human-centered design (HCD))

1. **Introduction.** Most governments are increasingly using information and communication technologies in their daily operations [1]. At the same time, the core transformative capacities of the Internet are shown as radically shrinking communication and information costs, maximizing speed, broadening reach and eradicating distance [2]. In 2004, Taiwan government proposed a plan of establishing an e-Government official document exchange system to improve the efficiency of the government's internal operation [3]. The main purpose of this project was to procure the efficient synchronization among government organizations and also promote the government to business to citizen (G2B2C) exchange of digitized documents between Taiwan government and citizens.

In 2005, only one year later, more than 1,500 governmental units adopted this system for synchronization among government organizations and all government internal documentation exchanges worked quite well through this system [4,5]. In 2006, the government moved to the next step for involving the G2B2C model. This new requirement made documentation of the government accessible to the external environment. However, the Research, Development, and Evaluation Commission (RDEC) of Executive Yuan (cabinet), which was in charge of this project, indicated that "although 70% of people know the e-Government plans, the bulletins and utilities are low, . . . ". The main reasons are concluded as poor design of websites, inefficient data search functions, and unawareness of service [6]. Thus, how to design an efficient user interface of this system is an important issue.