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探討民眾採用政府跨平台網頁設計(RWD)網站取代行動應用程式(APP)之使用意願~以科技接受模式為基礎

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Investigation of Public Use Intention to Replace Mobile Application

(APP) with Government Cross-Platform Responsive Website Design

(RWD) - Technology Acceptance Model

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摘 要

根據財團法人台灣網路資訊中心發布「2017年台灣寬頻網路使用調查報告」, 全國上網人數達80%,其中,網民主要上網方式為使用行動電信網路,顯示行動 上網已成國人最常使用的連網方式,而國人最常用來上網的設備以手機為主。基 於行動上網人口逐年大幅度增長,政府需提供完善之行動服務讓民眾使用,增加 民眾在手機上使用電子化政府服務的頻率,以提升便民服務滿意度。

惟政府機關推動 APP 服務,民眾使用下載率普遍不高。故近年來政府機關將開發政府 APP 服務的方向導向由提供政府資訊給民間進行 APP 加值創新應用,而政府部門在經費有限、節省公帑的前提下,提出以政府跨平台網頁設計(RWD)網站取代政府行動應用程式(APP)之作法。

本研究在探討影響民眾採用政府 RWD 網站意圖之因素。以「科技接受模式」 為基礎,結合「科技準備度」、「轉換障礙」等構面,組成綜合研究模型。資料蒐 集以某科技大學資管系學生為對象進行實證研究,運用紙本及網路問卷方式進行 調查,共回收 173 份有效樣本,並以結構方程式進行測量模式與結構模式分析。

研究結論可彙整如下:科技準備度樂觀特質會正向顯著影響對政府 RWD 網站認知有用性、易用性;科技準備度創新特質,在全部填答者,會正向顯著影響對政府 RWD 網站認知易用性;在具有政府 APP 使用經驗填答者,會正向顯著影響對政府 RWD 網站認知有用性;認知有用性、認知易用性正向顯著影響政府 RWD 網站之使用態度;具有政府 APP 使用經驗填答者,替代品排斥力正向顯著影響、感知轉換成本負向顯著影響使用者由政府 APP 改用 RWD 網站之使用態度;對於政府 RWD 網站之使用態度會影響其使用意願。依據實證之結果,提出客觀之建議予相關政府機構,以利後續有效推廣「政府 RWD 網站」的政策。

關鍵詞:跨平台網頁設計網站、RWD、行動應用程式(APP)、科技準備度、科技接受模式、轉換障礙

ABSTRACT

According to the "2017 Survey of Broadband Usage in Taiwan" released by the Taiwan Network Information Center, 80% of the population is connected to the internet. Among the findings, users primarily use mobile telecommunication networks, indicating that the mobile network has become the most common connection method. Furthermore, the public primarily use mobile phones to go online. As the mobile internet population continues to substantially grow year by year, the government must provide comprehensive mobile services to the public in order to increase use frequency of e-government services on mobile phones as well as improve convenience service satisfaction.

However, the download rate of government applications is generally low. Therefore, in recent years, the government has shifted from developing apps to providing information for APP value-added innovations by the private sector. Yet, due to limited funding and the need to curb public expenditures, the government has proposed replacing government mobile applications (APP) with government cross-platform responsive website designs (RWD).

This study explores factors that influence people's intentions to use government RWD websites. Moreover, a comprehensive research model is formed using the "Technology Acceptance Model", combined with "technology readiness" and "switching barriers". Data collection is based on an empirical study conducted on IM students from a technological university. The survey is conducted using paper and online questionnaires with a total of 173 valid samples collected. The structural equation model is then used to analyze measurement and structural models.

Study conclusions are as follows: technology readiness optimism has positive significant influence on perceived usefulness and perceived ease-of-use towards

government RWD websites. Technology readiness innovation has positive significant influence on perceived ease-of-use towards RWD websites in all respondents. To respondents experienced in using government mobile applications, the same innovation also has positive significant influence on perceived RWD website usefulness. Both perceived usefulness and ease-of-use have positive significant influence on use attitude towards RWD websites. To the same experienced respondents, exclusion of alternatives has positive significant influence on use attitudes, whereas perceived switching costs have negative significant impact on use attitudes toward shifting from government mobile apps to RWD websites. Use attitudes toward RWD websites affect use intentions. Based on the empirical results, the researcher proposes objective suggestions to relevant government agencies to facilitate effective subsequent promotion of the "government RWD website" policy.

Keywords: cross-platform web design website, Responsive Web Design (RWD), mobile application (APP), technology readiness, technology acceptance model, switching barriers