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Explaining and Predicting Users' Continuance Usage Intention Toward E-Filing Utilizing Technology Continuance Theory

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INTRODUCTION

Continuance usage intention is vital in today's environment because the longer a business firm can keep a customer; the greater the life-time revenue from that customer and at the same time the cost of serving the customer declines (Mittal & Lassar, 1998). Besides that the high level of user continuance usage intention is also a reflection that the program or the product is well designed and implemented (Lin, Chen & Fang, 2011) and it ensures the continued existence of many customer based electronic commerce firms (Bhattacherjee, 2001). Moreover, although initial acceptance is important in recognizing the success of an information system (Bhattacherjee, 2001) but continued usage is even more significant in ensuring the long-term viability of technology innovations (Premkumar & Bhattacherjee, 2008). Furthermore, Devaraj and Kohli (2003) argued that the long term usage of a technology will enhance the financial and quality performance of an organization. Thus, it is important for businesses to accentuate on continuance usage intention as the key for long term growth.

Guided by Vision 2020, Malaysia has embarked on an ambitious plan by launching the Multimedia Super Corridor (MSC) in August 1996. Seven specific flagship applications were identified as the pioneering MSC projects, which includes e-government as one of the flagships (Muhammad Rais & Nazariah, 2003). The Vision of e-government is to transform administrative process and service delivery through the use of ICT and multimedia (Lean, Zailani, Ramayah and Fernando, 2009). The projects under the e-Government flagship have been started since ten years ago aimed at building a more effective and efficient way to communicate and transact with the citizens and industries. One of the projects under e-government flagship is Online Tax System or e-Filing (Hussein, Mohamed, Ahlan, Mahmud & Aditiawarman (2010).

BACKGROUND

The e-Filing system in Malaysia which was introduced in 2006 by IRBM is receiving much attention and there has been an upward trend in the adoption of the system among taxpayers with the latest income tax submission of 2,330,298 via e-filing in 2014 (Annual Report, 2014). Among the factors that could have contributed to this increase are convenience, faster refund and cheaper cost. However, according to Bhattacherjee (2001), while initial acceptance of information system (IS) is very important toward realizing IS success but its eventual success depend on its continued use rather than first-time use.

In this vein, investigating the continuance usage intention of e-filing system is deemed to be important because as more citizens use e-filing services, the more operation and management costs are reduced (Wangpipatwong, Chutimaskul & Papasratorn, 2008). In Malaysia, IRBM has saved millions of ringgit annually by reducing cost of printing, imaging, postal and storage through their e-filing system. In 2009, a total cost of RM9, 162,845.92 has been saved via the e-filing submission of tax (Hasmah, 2009). Apart from that, Bhatnagar (2009) reveals that governments are spending millions of dollars to build online service delivery portals in terms of hardware, software, training and maintenance and communication infrastructure. In developing the e-filing system in Malaysia, millions of ringgit has been invested (Aziz & Idris, 2012; Azmi & Kamarulzaman, 2010) especially to upgrade the agency's computer hardware and software (Bernama, 2005). Therefore, in ensuring that the heavy investments invested in developing the e-filing online portals will not be wasteful, identifying the factors that will motivate the continuance usage intention is crucial.

As such, this paper has focused in determining the effect of two main central construct in determining the individual adoption; satisfaction and attitude, towards continuance usage intention.

LITERATURE REVIEW

Technology Continuance Theory

Technology Continuance Theory (TCT) by Liao, Palvia and Chen (2009) is the newest theory introduced in the context of predicting the individuals continuance usage behavior; This new theory is actually a combination of three previous theoretical models which has been widely used in predicting the user behavior in IS acceptance and continuance, namely the Technology Acceptance Model (TAM), Expectation Confirmation Model (ECM) and Cognitive Model (COG).

The major contribution by TCT according to Liao et al. (2009) is it combined two main central constructs; satisfaction and attitude; into one continuance model. So, it is applicable for all levels of adoption such as initial, short term and long term users. TCT is believed to represent an improvement over TAM, ECM and COG models in terms of applicability and explanatory power. Based on the research done by Liao et al. (2009), they found that although satisfaction has a temporary effect on behavioral intention but it is still subjected for rejection or willingness to continuously use a system in short term. However, they also revealed that the success of information system in long term is determined by users' attitude.

Figure 1. Theoretical framework
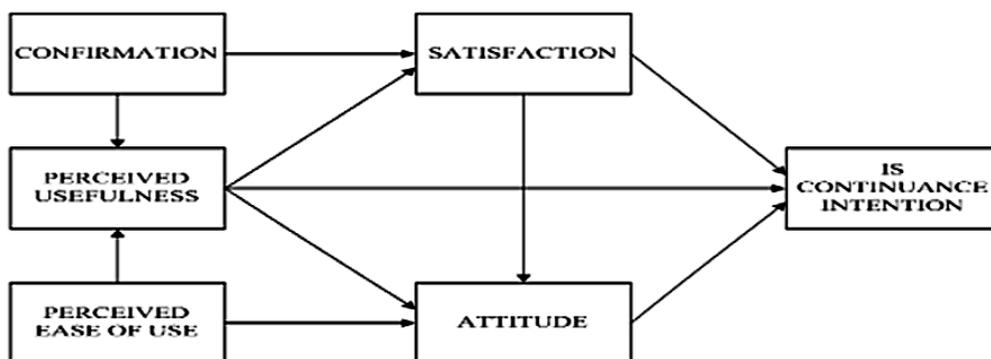
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