Understanding Online Banking Adoption in a Developing Country: UTAUT2 with Cultural Moderators

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ABSTRACT

The massive growth in digital devices and communication has spotlighted the wisdom of doing financial transactions through online banking. In developing Asian economies, online banking technology can strengthen financial systems by developing a solid connection between financial institutions and the local populace. Technology acceptance studies are under-researched in this region, especially with innovative models. Filling the gap, this paper uses a comprehensive model of extended Unified Theory of Acceptance and Use of Technology (UTAUT2), moderated by cultural variables. This will provide new insights into the determinants of technology acceptance by considering cultural effects on individual customers. The authors analyzed the model through structural equation modeling. The results validated performance expectancy, facilitating conditions, habit, perceived security, and price value as important antecedents of behavioral intentions. The cultural dimensions, collectivism, and uncertainty avoidance were found to be significant moderators in explaining behavioral intention and usage behavior for online banking.

KEYWORDS
Asia, Behavioral Intentions, Culture, Online Banking, Perceived Security, UTAUT2

1. INTRODUCTION

Asian countries are becoming more and more involved in online banking services, and the consumers in Asian countries are changing comfortably to online banking for their financial transactions. Throughout Asia, branch usage has dropped by 27 percent and online banking has increased by 35 percent during the last five years. Asian consumers make 25 percent of their purchase decisions through online devices (Sengupta, Lam, & Desmet, 2014). The developing countries are now quite aware of the need to participate in the journey of online banking (Iqbal & Qureshi, 2012). In its implementation of the paradigm shift from branch to digital banking, Pakistan is one of the success stories in the Asian region. Among other e-developments, the online banking services increased 102 percent during the last five years in Pakistan1. The advancement in technology has converted the preferences of individuals and corporate customers to avail themselves of online banking facilities in Pakistan (Afshan & Sharif, 2016). The adoption of technology is a consistent process which enables bank users to use the technology conveniently without the time and space constraints (Lin, 2013). Online banking helps customers avoid long queues and reduces their time, effort, and cost (Gerrard,
Barton Cunningham, & Devlin, 2006). It helps individuals and corporate entities to access their bank accounts anytime and anywhere, paying their utility bills, manage their money, and getting other valuable services without the hassle of going to physical bank branches (Hamid, Amin, Lada, & Ahmad, 2007; Simpson, 2002). Online banking strengthens the relationship between clients and banks (Karjaluoto, Riquelme, & Rios, 2010), and allows banks to reduce the cost of employees, cost of physical branches while simultaneously providing immediacy and ubiquity (Jayawardhana & Foley, 2000; Xue, Hitt, & Chen, 2011).

Several theoretical models (for example, the Technology Acceptance Model, Theory of Reasoned Action, Theory of Planned Behavior, Unified Theory of Acceptance, and Use of Technology) have been extensively used by previous studies to understand technology acceptance. Among them, UTAUT2 (Venkatesh, Thong, & Xu, 2012) is considered to be more relevant and comprehensive model for empirical analysis because it reviews and integrates the constructs of previous theories (Baptista & Oliveira, 2015). UTAUT2 is preferable because it provides a clear relationship between the core customer-oriented constructs and measure of behavioral intentions; it allows augmenting other relevant factors into its domain according to given technology, group or context; and it has a proven empirical background (Im, Hong, & Kang, 2011; Morosan & DeFranco, 2016). The current study selected and revisited the UTAUT2 model with perceived security for more accurate evaluation of customers’ acceptance in a developing economy. In addition to UTAUT2, the paper utilizes the cultural theory of Hofstede (1980) for moderator constructs to make the model more relevant to Asian culture.

Security concerns in the adoption of online technologies have been considered as a key factor inhibiting customers’ intentions and actual usage (Masrek, Mohamed, Daud, & Omar, 2014). Secured networks reinforce the customers’ adoption of online banking because customers feel themselves safe and secure (Malaquias & Hwang, 2016). Another study characterized customers as suspicious about the security of transforming information through the Web and about the use of online banking (Vatanasombut, Igbaria, Stylianou, & Rodgers, 2008). Prior studies in Asia, analyzing cultural differences in technology acceptance are scarce. Cultural dimensions are an interesting inclusion in evaluating the customers’ adoption of online banking because of globalization and systems (Straub, Keil, & Brenner, 1997). Baptista and Oliveira (2015) recently testified to the effects of cultural moderators on adoption of mobile banking in the African region. Using culture theory, they found positive moderation effects on usage behavior of five cultural dimensions: Individualism/Collectivism (I/C), Uncertainty avoidance (UC), Long/Short term (L/S), Masculinity/Femininity (M/F), and Power Distance (PD). Abbasi, Tarhini, Elyas, and Shah (2015) found that I/C is an important cultural moderator over academic behavioral intention and usage.

This study attempts to understand users’ acceptance of online banking adoption in a developing Asian country, Pakistan. The banking sector of Pakistan is in swift transition from physical to online banking. Traditionally, the Pakistani population tends to quickly adopt new innovations that provide them ease of use and better performance (Afshan & Sharif, 2016). None of the previous studies in Asia, especially in Pakistan, has addressed the customers’ acceptance of online technology in a broader and integrative way. To date, there is no study with a comprehensive model to explore the determinants of online technology in Asian countries. The previous works lack integration of the cultural variables into a broader model to investigate the users’ acceptance of technology. Paying heed to the recommendation of Abbasi et al. (2015), Pakistan could be more feasible ground for evaluating and implementing customers’ acceptance of online banking, especially after the wave of socio-political liberalization and the economic revival of its economy. This paper provides a unique and improved model to investigate different factors influencing online banking adoption in Pakistan and makes several contributions. First of all, taking the worthy suggestion of Venkatesh et al. (2012), we tested the established UTAUT2 theory in new cultural context (Pakistan). Secondly, borrowing from previous literature, we added perceived security as a predictor to account for the security concerns that are normally considered inherent in online systems (Kim, Mirusmonov, & Lee, 2010; Morosan & DeFranco, 2016). This addition is of particular interest because developing countries are
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