Factors Influencing the Adoption of Mobile Banking in India

Sindhu Singh, K.J. Somaiya Institute of Management Studies and Research, Mumbai, India
R. K. Srivastava, Sydenham Institute of Management Studies, Research and Entrepreneurship Education, Mumbai, India

ABSTRACT

The advancement of mobile communication and wireless technologies has made a rapid development in the sector of banking services using their mobile phones. A fine system with great potential has the capacity to attract a huge block of customers to opt for banking services through their mobile phones. The dynamism in the present era of technology, where many other channels are available, this mobile banking system stands alone to attract more customers to come in the net of using mobile banking services. This paper meticulously aims to investigate the factors influencing the intention of the customer to use mobile banking. It suggests an integrated model that incorporates the five antecedents namely, perceived ease of use, compatibility, social influence, security, and perceived cost on its influence on customers’ decision to use mobile banking. The study results revealed that compatibility, social influence, and security in their order of influence significantly affect the customers’ decision to use mobile banking. The theoretical model is empirically validated and explained 62 percent of the variance in intention to use mobile banking. The implications of this study’s findings for the future research and practice are described.

Keywords: Compatibility, India, Mobile Banking, Perceived Cost, Perceived Ease of Use, Security, Social Influence

INTRODUCTION

The wireless technology and the large penetration of mobile devices have created tremendous business opportunities to the financial institutions and other service firms. With the introduction of smart phones, customer can access various services and information at anywhere and anytime. The unveiling of newer technologies such as GPRS, Enhanced Data for Global Evolution (EDGE), and 3G data transmission incorporated in mobile handsets transformed the mobile device functioning the basic operations such as making voice calls to a multipurpose artifact. According to the latest report by Internet Telecommunication Union, the mobile penetration all over the world crossed 7.1 billion (ITU, 2013). A successful mobile banking system certainly will bring down the cost of setting up alternative channels like bank branches, increase the revenue by targeting the large market of unbanked segments, and attract more tech-savvy customers. Mobile banking enables a customer to do a wide variety of banking operations through their mobile phone, which offer’s ubiquity, mobility, temporal and spatial flexibility (Suoranta & Matilla, 2004; Rivari, 2005). As per the Juniper Research’s current
forecast, more than 590 million users will use their mobile device for banking by the end of 2013 and predicts to exceed 1 billion mobile banking users by 2017 (Juniper Research, 2013).

The developing country like India could tap the opportunity of mobile banking by providing financial services to the unbanked individuals where the number of mobile phones is more than the number of bank accounts. India ranked second largest in mobile penetration nearly 864 million mobile phone subscribers (ITU, 2013) whereas the number of bank branches is closely 100000 (RBI, 2012). Mobile banking is a cheapest way to offer financial services in India. For banks, it just costs 2 percent of what they spend on bank branches and about 10 percent of what they spend on automated teller machines. The fast-growing Smartphone market in India with prices bottoming out with more variants are adding with lower price points directly correlated with the growth of mobile banking in India. On the other hand, the broadband connectivity is limited still not reached to many places in India, and the Internet usage is much lesser around 160 million Internet users compare to mobile phone diffusion (Avendus, 2013). According to the latest reports; India has 53 million mobile banking users in 2013 (marketsimplified, 2013) which is increasing rapidly.

The banking systems in India are offering mobile banking services as push type or pull type services. In push type, is a one-way communication where the bank interacts with the customer via SMS (Short Message Service). The pull type is a two-way transaction which is further classified into five types. Under the pull type, the first one is called as IMPS (Inter-bank Mobile Payment Service) is a fund transfer service through NPCI (National Payment Council of India) jointly with RBI (Reserve Bank of India, governing body of the banking system in India). The second one is via bank application/software installed on mobile phone. The third type is USSD (Unstructured Supplementary Service Data) where the customer dials the bank’s service code and enquires the information on bank accounts. The fourth one under pull type is SMS-based mobile banking where as the fifth is Internet-based mobile banking in which the customer uses the mobile phone to do Internet banking.

Existing studies of mobile banking adoption revealed that the adoptions of mobile banking services are very low compared to the other banking channels (Kleijnen et al., 2004; Suoranta & Matilla, 2004; Rivari, 2005; Laukkanen & Cruz, 2009; Lee & Chung, 2009; Wessels & Drennan, 2010; Laukkanen & Vesa, 2010; Zhou et al., 2010; Sripalwat et al., 2011). Although, there are many advantages of mobile banking, when compared with developed countries like USA, UK, Finland, the adoption of mobile banking in India is at its infancy rate. Mobile banking has been of-late attained greater significance in India and there is a lack of empirical studies related with the adoption of mobile banking in India. The purpose of this study is to fill the existing gap by empirically establishing a model to understand the factors influencing the adoption of mobile banking in India. This paper is organized as follows: the first section describes literature review of adoption studies. The second section describes the research model and hypothesis development; the third section explains the research methods, and final section explains the research findings, discussion and implications.

**LITERATURE REVIEW**

Consumer adoption plays a major in the acceptance of new technology or service, and mobile banking is considered as an innovation or a technology. Many researchers have used various well known adoption theories and models to study the adoption behavior of mobile banking (Laforet & Li, 2005; Luarn & Lin, 2005; Laukkanen, 2007b; Lee & Chung, 2009; Laukkanen & Kiviniemi, 2010; Wessels & Drennan, 2010).

TAM (Technology Acceptance Model) (Davis, 1989) is the predominant model in the information system research to study the technology acceptance. TAM is based on Theory of Reasoned Action (TRA); a psychological theory
Awareness of Sustainability, Green IT, and Cloud Computing in Indian Organisations
Tomayess Issa, Girish Tolani, Vanessa Chang and Theodora Issa (2015). Green Services Engineering, Optimization, and Modeling in the Technological Age (pp. 269-287).
www.igi-global.com/chapter/awareness-of-sustainability-green-it-and-cloud-computing-in-indian-organisations/133068?camid=4v1a

Business Models for M-Services: Exploring the E-Newspaper Case from a Consumer View
www.igi-global.com/chapter/business-models-services/43964?camid=4v1a