## E-Commerce Development and Mobile Banking Using Social Cognitive Theory

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### INTRODUCTION

Mobile commerce (m-commerce) has been transformed through the technological innovations that have taken place in the banking sector. These innovations have taken advantage of the new electronic commerce (e-commerce) business models that have emerged in the financial industry to increase competition in the global marketplace. The m-commerce industry is largely dependent on the internet as the internet has changed management practices and enabled consumers and businesses more access to different products and services (Beal and Morimoto, 2012). In the banking industry, m-commerce allows an individual to utilize e-commerce such as the internet to do their banking on a mobile device like their cell phone (Ratten and Ratten, 2007). Banks are increasingly using m-commerce as it is a low cost technological development (Holland, 2008). As more global banking services are automated technological innovations like mobile banking are influenced by how quickly an individual adopts the service (Kuo & Tang, 2014).

This paper examines the importance of m-commerce in the banking sector by discussing how the youth market adopts mobile banking. Banks continually are refocusing their marketing strategies to take into account new technology developments so it is important to understand how the adoption process of technological innovations can be increased. A number of trends have occurred in the banking industry, which have influenced the use of mobile banking (Gao, Rohm, Sultan & Huang, 2012). Most people in developed countries now have a cell phone and an increasing number of these people also have the internet on their cell phone, which has made it easier for individuals to do mobile banking. There is also an increasing number of bank products and services available through electronic delivery, which has lead to an increased acceptance by consumers and businesses of e-commerce banking activities (Ratten, 2008). Electronic delivery of banking products and services can take a number of different forms (Seitz & Stickel, 1998). Consumers and businesses utilize electronic information communication in the form of emails (Pena and Brody, 2014). Information is also presented electronically to inform and provide information about products and services (Anton, Cameron & Rodriguez, 2013). Moreover, businesses and banks are interacting together for transaction banking.

One of the most technologically savvy demographic components of society is the youth markets, who have grown up using the internet (Kashi & Zheng, 2013). This paper discusses how the youth market adopts mobile banking and the factors that influence the adoption behavior. The youth market (also referred to as Generation Y) is an early adopter of new technology such as mobile banking, which is often internalized into a youth's lifestyle (Ratten, 2012b). In this paper, the youth market is defined as individuals between the ages of 18 to 29 years, which is in line with the definition espoused by the OECD (2001). The youth market is innovative and early adopters of banking technology (Ratten & Ratten, 2007). This paper will examine how the youth market adopts mobile banking and what internal and external environmental factors will determine whether a youth will utilize mobile banking. The research question that this paper addresses is:

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**Research Question:** What factors influence a youth's intention to adopt mobile banking?

This paper will be structured as follows. First, the literature on technology adoption is reviewed and the major theories that have been used by previous research are discussed with social cognitive theory being found to be the most relevant theoretical framework for the purposes of this paper. The conceptual model is then explained and the variables included in the conceptual model are justified and discussed. Next, the quantitative methodology that included a survey given to youths is stated. The findings from the testing of the model are examined and the implications for the banking industry are highlighted. Lastly, suggestions for future research are discussed.

#### BACKGROUND

The adoption of new technology innovations like mobile banking is dependent on an individual's behavioral intention. People can learn about technology innovations through behavioral or cognitive learning models. Behavioral learning models assume that as a response to external stimuli, learning will occur through observable behavior change (Ratten, 2012a). In contrast to behavioral learning models, cognitive learning models assume that there is also some problem solving an individual will be involved in after they have responded to an external stimuli (Ratten, 2013). A cognitive learning perspective is adopted in this paper as it acknowledges that learning involves processing a lot of information and is not just a direct response to something in an individual's external environment. Moreover, cognitive learning models explain behavioral intention in the banking industry by explaining how individuals are influenced by technological innovations in both their internal and external environment.

There are a number of different theories to explain cognitive learning models. These include the theory of reasoned action (TRA), the theory of planned behavior (TPB), the technology acceptance model (TAM) and social cognitive theory. The TRA is one of the earliest theories to explain cognitive learning and was first proposed by Fishbein and Ajzen (1975). The TRA proposes that an individual is influenced by other people's opinions of what they should do in addition to their own attitudes (Chan & Lu, 2004). The TRA has been widely used in previous research on technological innovations as a learning model that explains and predicts behavior (Ratten & Ratten, 2007). The TPB is an adaptation of the TRA but it includes behavior that is not under an individual's control (Ratten, 2014a). Ajzen (1985) developed the TPB to explain how an individual learns by pre-planning behavior. The TPB assumes behavior is not subject to change and has been criticized by previous researchers for not including an adaptive element of cognitive learning (Mathieson, 1991). The TAM was proposed by Davis (1989) to take into account the technological innovations developing from the use of the internet. The TAM proposes that an individual will accept technology by modeling other users of the technology (Chan & Lu, 2004). The TAM examines the perceptions of an individual to use a technology (Venkatesh & Davis, 1996). In addition, the TAM tries to understand whether a person believes a technology will be useful to them but it does not include any antecedent environmental variables such as age that affects the use of a technology (Ratten, 2014b). The TAM has been extended from its initial conception to include how social processes influence the adoption process of a technology (Venkatesh & Davis, 1996).

Social cognitive theory extends the TAM model by trying to include a more comprehensive understanding of behavioral intentions to adopt a new technological innovation. Social cognitive theory was proposed by Bandura (1986) to understand the interaction in the environment an individual has with their behavior. The major premise of social cognitive theory is that an individual can influence their actions 12 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/e-commerce-development-and-mobile-bankingusing-social-cognitive-theory/149046

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