



## Mobile banking innovations and entrepreneurial adoption decisions

Citation:

Ratten, Vanessa 2011, Mobile banking innovations and entrepreneurial adoption decisions, *International journal of e-entrepreneurship and innovation*, vol. 2, no. 2, April-June, pp. 27-38.

DOI: [10.4018/jeei.2011040103](https://doi.org/10.4018/jeei.2011040103)

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# Mobile Banking Innovations and Entrepreneurial Adoption Decisions

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## ABSTRACT

*This paper examines an individual's entrepreneurial adoption decisions to use mobile banking for both business and social reasons. A conceptual model based on social cognitive theory is developed to explain an individual's propensity to adopt mobile banking. The theoretical framework examines how advertising, experience, perceived risk, learning inclination, and entrepreneurial proclivity influence a person's intention to use mobile banking. This paper stresses the role of financial risk in determining a person's intention to use mobile banking and whether their entrepreneurial nature is influenced by their experience and advertising they are subjected to about the advantages or disadvantages of mobile banking. This paper ties together research on technological innovation with entrepreneurship and learning studies. The author stresses the importance for financial institutions to market the innovativeness of mobile banking whilst addressing security concerns. The impact of a person's social environment through personal contacts and acquaintances underpins social cognitive theory and helps to understand the motives for a person adopting mobile banking. The paper integrates mobile banking literature with current thinking on the importance of entrepreneurship and learning influences to how a person adopts a technological innovation.*

*Keywords: Banking, Cognitive Theory, Electronic Commerce, Entrepreneurship, Marketing, Mobile Banking, Mobile Commerce, Mobile Communications, Risk*

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## INTRODUCTION

Mobile banking has increased globally as increasing numbers of people have access to mobile phones and place more emphasis on real time financial transactions (Shen, Huang, Chu, & Hsu, 2010). Financial institutions have increased the products and services available electronically such as transferring money, depositing checks and paying bills (Chung & Kwon, 2009). This increase in mobile banking

has been a result of a number of global banking industry trends (Laukkanen, 2007). Firstly, the use of the internet has increased as it has become more accessible and cheaper. Most people have a mobile phone with an increasing number having internet capabilities that enable mobile banking (Ratten, 2009). Secondly, the globalization of the banking industry has enabled more people to use international banks. This has led to more competition on interest rates and credit card fees. Thirdly, more people are communicating electronically, which has enabled banks to market their products and

DOI: 10.4018/jeei.2011040103

services via mobile phones. It is also cheaper for financial institutions to communicate with their clients via mobile phones than traditional advertising mediums such as television and newspapers. These trends have led to the increased electronic availability of banking services and more people using mobile banking services (Ratten, 2008). However, there are also a number of financial risks from mobile banking including not being able to access funds and internet fraud.

The change in banking practices to be more electronic has led to easier access to money transfers and electronic funds (Ratten, 2007). It has also altered the way banking services are marketed to consumers (Wymbs, 2000). Mobile commerce (m-commerce) has changed banks marketing strategies as a result of technological innovations (Holt, Whitmire, & Knight, 1999). M-commerce is defined in this paper as the ability to conduct commerce using a mobile device such as a mobile telephone, personal digital assistant (PDA) or emerging mobile telephone equipment. M-commerce involves the conduct of any transaction involving the transfer of ownership to use goods or service that is completed using a mobile device. The core feature of m-commerce is that it allows a commercial transaction to be completed by using mobile electronic computer access. Technological innovations including wireless internet access has enabled banking services to become more electronic and enable banking to be done at any place or time (Takac, 1997). These technological developments in m-commerce have led to mobile banking being a low cost development (Holland, 2008).

There are many risks involved with new technology and it takes time for people to become comfortable with the change. For some people new technology will not replace the existing way they do their banking but will be an added service they can use. It may not be possible for all people and businesses to adopt mobile banking despite the fact that technology makes it possible. This is due to some people not having access to mobile phones or mobile communication being too expensive for them

to use. Moreover, some people prefer the face-to-face contact they receive from personalized banking services to stores that is not possible in mobile banking.

There are many risks in mobile banking as personal and commercial data is transmitted wirelessly and can be seen in some circumstances by third party intermediaries. The security of financial transactions on mobile banking devices is a prime concern for customers of this service. The risk taking nature of entrepreneurship is also related to the relatively high risk of something going wrong with security in mobile banking systems. Many financial institutions recommend people take caution with mobile banking due to the security risks and regularly check their banking statements. In addition, due to the global financial crisis of the past year there has been an increased sensitivity about financial risk due to countries such as Ireland, Greece and Spain facing banking crises because of large debt levels.

Early adopters of new technology like mobile banking are often risk takers because of their lack of knowledge about the service. These consumers are technologically savvy but also orientated to learning about the potential benefits and risks of mobile banking. This entrepreneurial spirit is part of the person's lifestyle with mobile banking being a way to gain insight into new technological applications that require a high level of learning. This paper extends the literature on m-commerce to focus on an entrepreneurship and learning capabilities of a person intending to adopt mobile banking. Other environmental factors including advertising, experience and perceived risk in influencing a person's use of mobile banking is also addressed. Therefore, the research question that this paper seeks to examine is:

Research question: What influences an individual's intention to adopt mobile banking?

The structure of this paper is as follows. Firstly, the literature on technological innovations and adoption behavior is examined. A comparison of different theories relevant

to mobile banking is addressed with social cognitive theory being espoused as the most relevant for the purposes of this paper. Other theories on technological innovation include the technology acceptance model, theory of planned behavior and theory of reasoned action are reviewed but social cognitive theory is applied as it includes a wider environmental perspective including both internal and external factors that incorporate both entrepreneurship and learning perspectives that the other theories do not explain in as much detail. The theoretical framework for examining the antecedents of a person's intention to adopt mobile banking is stated. The relationships between advertising, experience, perceived risk, learning orientation, and entrepreneurial orientation with a person's intention to adopt mobile banking is highlighted through a discussion of a set of propositions. Next, the importance of bridging the gap between a person's entrepreneurial and learning capabilities to mobile banking is stated in the future research directions section. Practical implications for the banking sector are also stated.

## LITERATURE REVIEW

Technological innovation enables new ideas and creations to take place that update or supersede existing products and services (Faulkner & Runde, 2009; Rogers, 1995). In most cases the technology can exist with existing technology but can involve a new use of an existing technology (Birkinshaw & Mol, 2006; Rycroft, 2006). Scientific research and development of the technology industry has enabled activities to be undertaken to generate new technology innovations (Cantisani, 2006). Previous research has highlighted the importance of technological innovations to mobile banking (Holland, 2008; Puschet, Mazzon, & Hernandez, 2010; Ratten, 2008; Salo & Karjaluto, 2007). Mobile banking occurs when mobile wireless (handheld) devices are used to communicate information via a public and private computer networks (Laukkanen & Kiviniemi, 2010). Web-enabled mobile devices have become smaller, which

has enabled more mobile phones to be internet enabled (Wymbs, 2000). Banks are utilizing m-commerce as a way of integrating mobile computing devices into business processes (Puschet et al., 2010). This has allowed the banks to communicate information via the internet about the products and services (Holland, 2008). It has also enable people to do their banking online through an electronic payment system (Wymbs, 2000).

Mobile banking has enabled people independence of time and place to do their banking. Communicating information through a free space environment has enabled banking to become mobile (Aungst & Wilson, 2005). Previously most banking was done face-to-face or through fixed physical wired conduits, which limited mobility and productivity for businesses (Lu, Yu, Liu, & Yao, 2003). However, there are risks involved that limit mobile banking services such as technological barriers caused by other buildings and signals that decrease connectability. Many large office buildings in metropolitan areas have had to erect more telephone poles that can carry the large amount of traffic from mobile phone signals. In addition, there is now greater competition for access to telephone grids by operators as more people are using mobile phones. For some companies like Telstra, Optus and Vodafone in Australia this has meant that there is greater competition for services that have wide geographic coverage.

Mobile banking includes the depositing and withdrawing of money, payment transfer and payment of bills. Innovative usages of mobile banking have included using a mobile phone as an ATM card for those people without a bank account and for paying parking fees (Ratten, 2009). However, despite the advantages of mobile banking people still want personal contact with financial institutions. Therefore, most mobile banking customers are also likely to visit bank branches offices. An example of this is PNC Bank, which is the fifth largest bank in the United States. At PNC Bank customers can gain access to an e-wallet, which acts like an online wallet in addition to personal phone

updates from the bank detailing their credit and personal banking history.

Mobile phone users are increasingly becoming knowledgeable about innovative service capabilities. Mobile banking has space and time advantages but can also be more risky than traditional banking. Space advantages are that small rather than large computers can do mobile banking. In addition, less bank branches are needed as people can do their banking electronically. Time advantages include people being able to do real time banking and important business transactions are completed quickly (Seitz & Stickel, 1998; Barnett, Hodges, & Wiltshire, 2000). Risk concerns are increasing with mobile banking as third party intermediaries have access to internet communications.

Mobile banking requires a person to learn about a technological innovation. Theories about adoption behavior often focus on how a person learns about the technological innovation (Huang & Choi, 2010). In the technology innovation literature the behavioral and cognitive learning models are utilized to explain adoption behavior (Leiblein & Madsen, 2009). Behavioral learning models examine how people respond to external environmental factors. Once a person has reacted to external stimuli they will usually have an observable change, which forms part of learning about their behavior. Cognitive learning models go further in explaining behavior change as they focus on the problem solving abilities of an individual (Ratten, 2010). The benefit of cognitive learning capabilities is that they look into how a person processes information by responding to external stimuli (Lin, 2009). The cognitive learning perspective is adopted in this paper as it enables an explanation of how a person processes technological innovations like mobile banking. The main theoretical framework to explain technology adoption behavior in the literature are the theory of reasoned action (TRA), the theory of planned behavior (TPB), the technology acceptance model (TAM) and social cognitive theory. Each of these theories will now be discussed.

The TRA explains how a person interacts with their environment. The TRA was first proposed by Fishbein and Ajzen (1975) to understand how a person perceives their immediate environment. The focus of the TRA is that a person responds according to their attitudes of the perceptions of how other people think they should respond. The TRA has widely been used to explain individual behavior and how a person is influenced by other people's opinions (Ratten & Ratten, 2007).

The TPB like the TRA acknowledges that a person will change their behavior based on their environment but goes further than the TRA by stressing that many factors are not under a person's direct control. Instead the theory contends that environmental influencers are impacted by how a person preplans their behavior (Ajzen & Fishbein, 1980). This is also a result of the TPB assuming that a person plans their actions and is not adaptive (Mathieson, 1991).

The TAM was first proposed by Davis (1989) to understand how people adopt technology particularly from the use of the internet. The premise of the TAM is that a person will adopt technology more quickly when they have been exposed to it from other users (Chan & Lu, 2004). The TAM has emerged as one of the most popular technology adoption theories as it tries to explain whether a person will find a technology beneficial (Tong, 2010). A weakness of the TAM is that it focuses on a person's perceptions of a technology but does not focus on external environmental conditions that might impact a person's behavior like economic factors (Venkatesh & Davis, 1996). Due to this perceived limitation of the TAM it has been revised by Venkatesh and Davis (1996) to include social processes that impact the technology adoption process.

Following the TAM model inclusion of social factors, social cognitive theory goes further by including both internal and external environmental influencers on technological innovations. Social cognitive theory is a relatively new addition to the theories on technology adoption behavior as it includes how a person's

environment affects their adoption behavior. Bandura (1986) first proposed social cognitive theory to help understand people's thoughts and actions in the health sector. Social cognitive theory has recently been extended to focus on technology applications as a person's social interactions will often be a result of environmental change. A person's own actions can be intentional or by chance depending on their environment (McCormick & Martinko, 2004).

Technological innovations change a person's social environment and influence their behavior (Kock, 2004). Social cognitive theory helps to understand the rationale why people change their behavior as a result of their environment (Ratten & Ratten, 2007). The reasons for the behavioural change may be from observing other people in their social group (Li, Lu, & Ren, 2007). Alternatively it may be the result of the environment constantly changing from the advancement of scientific knowledge made possible by technological innovations (Cantisani, 2006). Knowledge about new processes and technology means that a person's behavior alters (Chan & Lu, 2004). Often a person's social group is a repository of knowledge that facilitates individual learning (LaRose & Eastin, 2004). As a person interacts with their environment their behavior will alter as a result of their experience (Bolt et al., 2001).

Social cognitive theory is based on the premise that the environment is dynamic and either group or individual psychological behavior determines how they will learn (Pincus, 2004). Social cognitive theory has also been referred to as social learning theory as it acknowledges that a person's environment is dynamic (Wood & Bandura, 1986). Social cognitive theory is adopted in this paper as it encompasses both internal and external factors, which is important in understanding the antecedents to a person adopting mobile banking.

In the context of rapidly changing economic conditions made possible by events like the global financial crisis, social cognitive theory enables a variety of environmental factors affecting technology adoption to be studied.

Social cognitive theory assumes that internal and external environmental influencers of a person's behavior can be observed in a person's social context. Social contexts that are more informal in nature such as a coffee meeting with friends or an informal get together with work colleagues are more likely to involve the use of mobile telephones rather than a social context that has a more formal nature such as a wedding or work meeting. The next section will further explain the theoretical framework of this paper, which is premised on social cognitive theory.

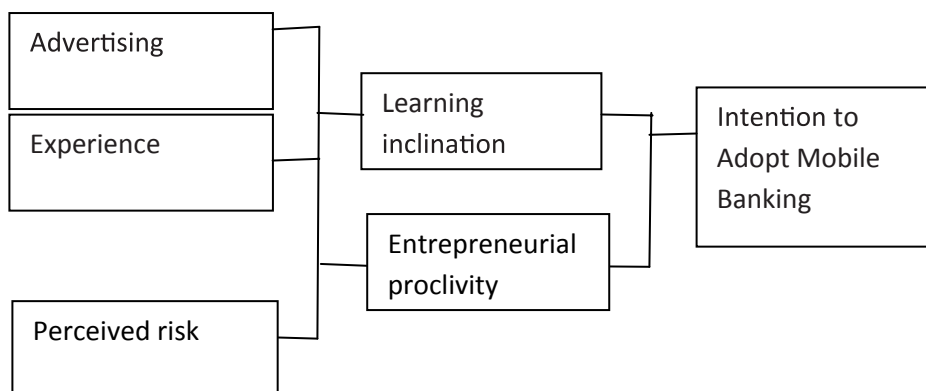
## CONCEPTUAL MODEL

The conceptual model in this paper examines the antecedents to a person adopting mobile banking. Five variables (advertising, experience, perceived risk, learning inclination and entrepreneurial proclivity) are included in the theoretical framework as being the most important antecedents that affect a person's intention to adopt mobile banking. The conceptual model is depicted in Figure 1. These variables are both internal and external environmental factors linked to social cognitive theory. The dependent variable in the theoretical framework is intention to adopt mobile banking and through the propositions posited the paper will explain how a person adopts a technological innovation like mobile banking.

Advertising is a major external environmental influencer of a person's behavior. Mobile banking advertising can include SMS messages and television commercials that encourage a person to use mobile banking. Social cognitive theory implies that in the case of mobile banking both internal and external environmental factors will affect the adoption of the technology. It is important in the adoption process of mobile banking to focus on the way a person acquires and learns about new technology through their social environment. A person with more experience of adopting new technologies is more likely to use mobile banking. However, the perceived risk of mobile banking



Figure 1. Conceptual model



due to security concerns may impede people adopting mobile banking. A person's level of perceived risk will be impacted by how entrepreneurial they are and how much they are willing to learn about the new technology. When a person is focused on learning about the advantages and disadvantages of mobile banking they are likely to be proactive about finding out more information on the product. As many new technologies like mobile banking are new to the market and have not been used much by a person's social network there is a degree of entrepreneurialism amongst those people adopting products like mobile banking. A person's entrepreneurial proclivity about mobile banking includes the level of proactiveness, innovativeness and risk taking ability. Mobile banking incorporates entrepreneurial capabilities as it is an innovative way of banking that incorporates traditional banking with emerging technologies. As social cognitive theory is a learning theory it links well to the idea of a person having a learning inclination to new technologies like mobile banking.

People process information about new technologies by experiencing how people use it in their social network. It often takes time for a person to learn about the risks involved with mobile banking and how to mitigate these perceived safety concerns. Often a person will model their behavior on others in their social group (Mizerski, 1982). The behavior is influ-

enced by the expectations about the benefits or disadvantages of a technology and the role of their behavior in influencing these risks (Bandura & Adams, 1977). People base their behavior on their own experience in addition to information they find through outlets like advertising (Godding & Glasgow, 1985). The theoretical framework of this paper proposes that a person's entrepreneurial proclivity and learning inclination influence how advertising, experience and perceived risk will influence their intention to adopt mobile banking. The next section will discuss each of the propositions based on the theoretical framework.

## PROPOSITIONS

### Advertising

Advertising takes a variety of forms including television, newspaper and radio (Rogers, 1995). Prior research indicates that people shown advertising about how a technology is used are more likely to emulate this behavior (Sheth, Mittal, & Newman, 1999). People are exposed to different types of advertising about technology that influence the development of new behaviors derived from these marketing campaigns (Mizerski, 1982). Advertising is an external environmental factor that influences a person's adoption decisions by imitating the action of other technology users (Celsi, Rose,

& Leigh, 2003). In most cases advertising will result in a person's behavior changing from information communicated. Information found in advertising campaigns is then shared in a person's social group that includes friends, family and acquaintances (Ratten & Ratten, 2007).

Advertising is a source of information for companies to sell products and services. The information can be verbal or written and transmitted by a variety of outlets. A person's behavior can change when the information transferred about a product or service indicates a benefit for the person involved (Rice & Bennet, 1998). Advertising has a strong influence on a person adopting a technological innovation by changing their behavior (O'Bannon, 2001; Kaufman, 1991). People have been encouraged to use mobile banking through advertising aimed at focusing on the advantages of the technology including privacy and direction communication with banks (Laukkanen, 2007). The popularity of mobile banking has increased as more advertising is devoted to showcasing the social networking functions of mobile communications (Snowden et al., 2006). Advertising in a variety of print and non-print mediums is likely to reach a large number of people who are interested in mobile banking. This leads to the first proposition:

**Proposition 1.** The more exposure a person has about mobile banking, the more likely their intention to adopt mobile banking.

## **Experience**

The experience a person has with a technology helps them to develop expectations about the usage of a product or service (Ratten & Ratten, 2007). Experience can take a variety of forms including imitating or copying another person's actions in the hope that this will lead to the adoption of the technology (McCormick & Martinko, 2004). Technology innovations are experienced by people at different rates which are influenced by internal and external environmental factors. Internal environmental factors include a person's ability to learn new things and

their ability to spend time gaining knowledge about the technology. More importantly for most people are their internal environment in which they share their consumption habits with their social network (Herr et al., 1991). Social networks include a person's friends, family and acquaintances that are influenced by external environmental factors.

An important external environmental factor is a person's country of origin. Countries such as Sweden and South Korea have high broadband access rates that make it easier for people to use m-commerce products. Research by McCoy, Galleta, and King (2007) have shown that a person's experience with a technological innovation largely depends on which country they live in. The mobile phone network in a country impacts on the ability of a person to use portable technology devices (Takac, 1997). In addition, as people have greater access to broadband services in some countries a service like mobile banking is likely to influence a person's self prestige and encourage lifestyle alternatives that facilitate easier access to banking services. People use mobile banking for a variety of reasons including checking their bank balances, paying for movie tickets and paying car parking tickets. A person that has experienced other people using mobile banking is more likely to use the technology. This leads to the second proposition:

**Proposition 2.** The more experience a person has with mobile banking, the more likely they are to adopt mobile banking.

## **Perceived Risk**

Perceived risks are an important component of whether a person will adopt a technological innovation. These perceptions form part of a person's expectations about the outcomes they believe will result from a action or behavior (Bandura, 1986). Expectations often are in the form of usefulness and ease of use of the technology (Lu, Yu, Liu, & Yao, 2003). The usefulness of a technology is related to a person's belief system about how the technology will



affect them (Rice & Bennett, 1998). A person that perceives a technology is useful will also likely have an expectation that the technology will achieve the desired outcomes (Henry & Stone, 1999). These expectations have also been referred to as self belief or self efficacy (Bandura, 1986) and influence the degree of risk a person perceives a technology will have when it is used. The ease of use of a technology is related to a person evaluating whether their behavior will be attainable. This behavior is part of a person's internal value system, which helps to determine future actions they will engage in (Bandura, 2001). The value system relates to a person perceiving that a technology will have time and costs savings thereby making it easy to use.

A person with a more position expectation that the risks of a technological innovation will be low and the benefits high will usually have a higher degree of usage (Henry & Stone, 1999). The risks of a technology also impact a person deciding whether the behavior they engage in will be valuable (Bandura, 2001). It is also important for a person to determine if they have the ability to conduct complex tasks which may be risky (Bolt, Killough, & Koh, 2001). People with a higher degree of risk tolerance to using new technological innovations are more likely to experiment with a new technology (Guan, Mok, Yam, Chin, & Pun, 2006). People are reliant on information about perceived risks of mobile banking in determining whether they will have a positive reaction to mobile banking. When a person believes the perceived risks of mobile banking are low relevant to the benefits of the technology then their propensity to use mobile banking should be higher. This leads to the third proposition:

Proposition 3. The lower an individual's perceived risks about mobile banking, the more likely they will adopt mobile banking.

### Learning Inclination

A person's orientation to learning is an important indicator of their willingness to adopt

a new technology. A person learns by acquiring knowledge, which influences whether their behavior will change as a result of new insights. An individual will learn at different rates depending on a variety of factors including age and education. An individual's learning inclination is the set of beliefs and values they use to create knowledge (Sinkula, Baker, & Noordewier, 1997). An individual with a strong orientation towards learning constantly seeks to nurture new ways of thinking by expanding their knowledge base. The knowledge a person has can help determine how effectively and quickly a person learns (Tsang, 1999). Technological innovations like mobile banking encourage a person to look at new ways of fostering and transferring knowledge to increase their ability to learn about new technologies. People who foster a culture of questioning knowledge and learning from their experiences have the ability to change by fostering new technology habits. A person who has a high emphasis on learning about new products is more likely to want to adopt mobile banking. Therefore, this leads to the fourth proposition:

Proposition 4. The higher an individual's learning inclination, the more likely they are to adopt mobile banking.

### Entrepreneurial Proclivity

The term entrepreneurial proclivity has also been referred to as entrepreneurial orientation in the entrepreneurship literature (Miller, 1983). Entrepreneurial proclivity is defined as a person having a strong focus on innovative, risky and proactive behavior (Lee & Peterson, 2000). Entrepreneurial proclivity is essentially a personality issue as their behavior is manifested in the type of innovative, risk taking and proactive behavior that they engage in. As technology constantly changes a person who is entrepreneurial has access to new ideas and ways of thinking (Miller, 1983). This is important as they are predisposed to technologies that are entrepreneurial in nature and change current managerial processes.

A person with an entrepreneurial mindset is likely to have a decision making style that is practical in nature and orientated to learning about new products. In addition, the context in which a person operates will influence whether they are entrepreneurial in terms of how they organize resources, form new firms and create value with new technologies. The process of product innovation is important in facilitating engagement with proactive innovations that are changing the global marketplace. A person who is entrepreneurial is likely to enjoy being the adopter of new innovations that are facilitated by the nature of the invention. People who try new innovations are likely to want to try new technologies like mobile banking. The technological change made possible through mobile banking has required people to focus more on the processes and practical applications of the technological innovation. Hence, this leads to the fifth proposition:

Proposition 5. The more an individual has an entrepreneurial proclivity, the more their intention is to adopt mobile banking.

### Managerial Implications

The theoretical framework and propositions stated in this paper have important managerial implications for the banking industry. Financial institutions around the world can capitalize of the innovativeness and newness of mobile banking by focusing their marketing efforts on how people adopt the technology. By understanding how people perceive the riskiness of mobile banking and how banks can focus on the learning capabilities of the technology, banks can increase the number of people who use mobile banking. This paper has discussed the role that advertising and experience play in helping a person decide whether to adopt mobile banking so banks can more effectively advertise their services to the type of customers that are more likely to adopt the technology. Financial institutions can also focus on the early adopters

of mobile banking that have more experience using the technology to encourage other people in their social network to also adopt mobile banking. By talking with these early technology adopters banks can showcase the innovativeness and opportunity to learn about a new technology that is at the forefront of technology change in the banking industry.

### Future Research Directions

This paper included a section on perceived risk but more research is required on security risks in the financial sector. Particularly with the global financial crisis more attention needs to be devoted to how people's feelings about financial institutions have changed. There has been more media attention placed on the security risks of global banks and the connection between risk taking intentions and how people actually behave with regards to mobile banking needs further attention. Questions about the timing of mobile banking adoption are warranted in future research to take into account how the global financial crisis is affecting people's behavior. For example, many people might intend to adopt mobile banking but perceive it being too risk in the present economic climate to actually adopt mobile banking. In addition, more longitudinal and case study work is required on whether people saying they intend to adopt mobile banking actually adopt the technology and how long it takes from intention to actually using the technological innovation.

The theoretical framework of this paper was posited on social cognitive theory, which incorporates both internal and external environmental factors. Future research needs to examine in more detail using the propositions in this paper as a guide how technological innovations like mobile banking are incorporated into a person's lifestyle. The personal attributes of a person including their focus on learning and entrepreneurship needs to be examined in a longitudinal study to understand how new product innovations like mobile banking are used. More empirical and case study work is

required on how the influence of advertising on a socially coherent group is dependent on the level of accumulated learning in that group and its absorptive capacity.

As there are many banks offering mobile services more research should focus on the internationalization of banking services and whether more people are using international banks when conducting their mobile banking. Moreover, more work is needed on the relationship between social settings, a person's culture and their expectations about mobile banking. In more developed countries people are likely to have greater expectations about mobile banking than in countries in which the culture does not expect many technological innovations and having a mobile phone does not reflect one's social standing in the community.

More research is also required on demographic factors such as age and nationality in examining how they influence the adoption process of mobile banking. Whilst anecdotal evidence suggests that younger consumers are more enthusiastic adopters of mobile banking the practical evidence of this may be shown in future research to illustrate that age is not a major determinant of technology adoption rates. Future research should focus on the impact of a person's entrepreneurial orientation rather than age as a precursor to adopting mobile banking. In addition, more research needs to examine how entrepreneurship is incorporated into a firm's creation or organizational change process. As this paper discussed the role of a person's entrepreneurial proclivity it does not examine the new product development process that could be incorporated into future research projects. As this paper focused on social cognitive theory, future research could compare and contrast social cognitive theory with other technology adoption theories found both in the technology management and entrepreneurship literature.

## CONCLUSION

This paper has discussed the different factors that influence a person's decision to use mobile banking. A social cognitive theory perspective was utilized to understand the role of advertising, experience, perceived risk, learning inclination and entrepreneurial proclivity in determining a person's intention to adopt mobile banking. The literature on technological innovations and technology adoption processes was reviewed with a focus on behavioral learning models. Propositions were derived from the theoretical framework and explained in the paper. Managerial implications and suggestions for future research were stated that illustrated the importance of understanding both internal and external environmental factors determining a person's behavioral intention to adopt mobile banking.

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