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Towards anchoring Users' Switching to Mobile Banking with Expectancy Theory

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Abstract

The rapid proliferation of advanced mobile devices has made mobile banking (m-banking) an attractive option for banks and mobile service providers; however, consumer demand for m-banking is low. In this study, we develop a model, anchored by expectancy theory, and validate it using data collected from 493 mobile phone users to predict intentions to switch to m-banking. Our findings suggest that perceived mobility, relative advantage, and self-efficacy are positively related to user intentions to switch banking channels. Perceived complexity is negatively related, perceived financial resources, and perceived risk are not related to user intentions to switch.

Keywords

M-Banking, Switching, Expectancy Theory, Perceived Mobility

INTRODUCTION

M-banking is defined as providing banking services via mobile telecommunication devices such as mobile phones (Mallat et al. 2004). M-banking is generally viewed as a more flexible and ubiquitous service than existing banking channels (Barnes and Corbitt 2003). It has the potential to transform the banking and telecommunication sectors (Kim et al. 2009). It generates revenue for mobile service providers and reduces the costs of providing banking services (Kim et al. 2009). Banks want their users to migrate from branch or phone services to m-banking services (Kim et al. 2009).

Recent progress in wireless technology and rapid proliferation of advanced mobile phones have been advantageous to m-banking (Kim et al. 2009; Sripalawat et al. 2011). Yet, the take up of m-banking has been low to date (Lee et al. 2012). Hence, there is some scepticism as to the likelihood of m-banking evolving into a ubiquitous banking service.

In the late 1990s, banks attempted to attract users to m-banking, but their attempts were in vain (Mallat et al. 2004). That failure was largely attributable to the users not having recognised the full potential of m-banking and that the technology was not sufficiently evolved with ongoing issues in relation to speed, security and design (Wang et al. 2006). Now that the technology has matured and many of these problems have been resolved, major banks in the world are offering m-banking delivery channels (Sharma and Gutiérrez 2010).

Despite this, our understanding of the attractiveness of m-banking is far from conclusive, and there has been little behavioural research on users' intentions to switch from one service channel to another. Prior research generally considered m-banking a standalone application, neglecting the fact that signing on to m-banking almost always requires a user to switch from one form of banking service to another. For instance, prior research took a human-computer interaction perspective on functional and interface requirements of mobile devices for different users (Constantiou et al. 2007). Prior studies also used the technology acceptance model to study the adoption of m-banking (Chiou and Shen 2011; Luarn and Lin 2005; Sohail and Al-Jabri, 2013) and the dynamics between trust and users' intentions to use m-banking (Kim et al. 2009; Luo et al. 2010). Some studies examined m-banking from a service quality perspective, focusing on user satisfaction as a dependent variable (Chung and Kwon 2009).

However, as mentioned previously, m-banking is just one service in a bundle of banking services that includes branches, ATMs and online banking. Bank account holders usually perform their banking functions via multiple channels; therefore, research that treats m-banking as a standalone technology application fails to see the overall picture of how users access banking services.

We are not aware of any prior studies that have investigated the issue of users' switching behaviour from other banking channels to m-banking. This switching behaviour is one of the most important issues for the success of m-banking in the future, and the need for more research into this area has been identified in this article. Many academics have also echoed this call for more research with a view to understanding whether current bank users switch from other channels (e.g., branch) to emerging self-service technology (SST) channels (Curran and

Meuter 2007; Shin and Lee 2005). Bank executives are also keen to understand users' acceptance of technologymediated m-banking (Constantiou et al. 2007). This study is intended to answer these calls. Specifically, it aims to answer the following question: What factors motivate users to switch to m-banking?

The remainder of this article is organised as follows. The following section introduces expectancy theory as the theoretical frame of the study. Section 3 describes the proposed model and hypotheses derived. Section 4 presents methodology and Section 5 discusses the findings. Section 6 discusses the theoretical and practical implications of the work and its limitations. Section 7 concludes the paper.

EXPECTANCY THEORY

Expectancy theory, originally developed by Vroom (1964), has been the theoretical foundation for a large body of studies in education, psychology, organisational behaviour and management accounting. Expectancy theory asserts that the perceived relative attractiveness of various options is related to users' beliefs about the consequences to which each option will lead, and their beliefs about the desirability of those consequences (Chau 1996). According to expectancy theory, users purposefully choose from alternatives in order to maximise pleasure and minimise pain. Users assess the potential outcomes of their actions in terms of likely rewards and choose their actions based on the desirability of rewards (Vroom 1964).

According to Vroom (1964), expectancy theory is characterised by three important concepts: valence, expectancy and instrumentality. In other words, users' attitudes under this theory depend on a perceived link between effort and performance (expectancy), a perceived link between performance level and reward level (instrumentality), and satisfaction of the reward (Vroom 1964).

IS researchers apply expectancy theory in different technology contexts. They apply the theory to study users' decisions to approach or avoid new technologies. For example, Chen and Lou (2001) used expectancy theory to investigate why users adopt online learning technology. Other researchers have applied expectancy theory to study the information privacy concerns of online users (Hann et al. 2007), the expectations and satisfaction of end users (Au et al. 2008), and the motivation of software developers to be involved in future open source software development projects (Wu et al. 2007).

RESEARCH MODEL AND HYPOTHESES

We employ expectancy theory to characterise the variables related to m-banking and predict how these variables affect users' intentions to switch from one banking channel to another. Expectancy theory is useful for our research problem because it models the role of beliefs in decision-making and focuses on the cognitive process that occurs before a behaviour is undertaken or a choice is made (Hann et al. 2007). It helps to explain how an individual chooses between alternative forms of behaviour (Hann et al. 2007). The goal of the model is to understand users' intentions to switch (ISW).

Valence

Valence indicates anticipated satisfaction with, or desirability of, outcomes arising from using new technologies (Hann et al. 2007). It recognises that behavioural action is formed by judgments about the importance of the consequences of the behaviour (Hann et al. 2007). In our research context, users first experience MDSs or m-banking and form a perception about it. Valences cover the degree of mobility of the services (perceived mobility) and users' perceptions of the advantage (perceived relative advantage), which reflect the capability of m-banking to enhance the task performance of a user.

Perceived Mobility (PM)

Perceived mobility refers to the extent to which an information system can be accessed independent of time and place (Mallat et al. 2009). Compared to other banking channels, m-banking is distinctly independent (Laukkanen 2007). Hong et al. (2008) found that the association between perceived mobility and the intention to use information content was more salient than the association between perceived mobility and the intention to use mobile entertainment services.

Following expectancy theory, we argue that if users perceive this feature of m-banking to be of valence, they may consider switching to m-banking from their current channel. M-banking could be of particular valence when users have a busy schedule or to make better use of idle time (e.g., waiting for a bus). Mobile services are of particularly high valence when users need to handle routine or emergency transactions to meet efficiency needs (Bina and Giaglis 2007). M-banking can be useful for users who value mobility, and they will be more likely switch to m-banking. Thus, we hypothesise the following:

H1: If users perceive m-banking to be of high mobility, they will have a high intention to switch from other banking channels to m-banking.

Perceived Relative Advantage (PRA)

Perceived relative advantage is "the degree to which an innovation is perceived as being better than its precursor" (Moore and Benbasat 1991, p. 195]. Prior research demonstrates that perceived relative advantage has a significant effect on users' intentions to adopt a web channel (Choudhury and Karahanna 2008). Users want to maximise value in their decision-making (Chiou and Shen 2011). Following this, we argue that users will choose a new channel if they perceive it to be more advantageous than traditional channels (Choudhury and Karahanna 2008). Users will also evaluate the desirability of relative advantage leading to valence. A new system that does not help users to perform their job better is not likely to be received favourably, regardless of how carefully it is implemented.

Generally, users develop perceptions of a relative advantage for m-banking in two ways. First, they generally have experience with traditional banking channels (e.g., branch and ATM). If users value the services provided by the current channel(s), then there is no need for them to explore other options. Hence, they are less likely to perceive m-banking to be better than current channels and are less likely to switch to m-banking. Second, users may have experienced mobile services such as mobile shopping and mobile ticketing. Users who have had satisfying past experiences with other mobile services may be more disposed to switching to m-banking than users who are unfamiliar with mobile commerce. In summary, users assess whether m-banking has a relative advantage over their current banking channel(s). Thus, we hypothesise the following:

H2: If users perceive m-banking to be of a high relative advantage, they will have a high intention to switch from other banking channels to m-banking.

Expectancy

If users evaluate m-banking as a system of valence, they then determine the amount of effort they are willing to exert to switch to m-banking. Users' efforts depend on both technological and user characteristics. For instance, if users perceive m-banking services to be more complicated to use than physical branches or ATMs, they will be less likely to switch to m-banking. If users consider themselves incapable, they may feel that switching to m-banking is beyond them, and thus decide to stick to their current channel. Below, we examine two variables that belong to the category of expectancy: perceived complexity and perceived self-efficacy.

Perceived Complexity (PCMX)

Perceived complexity is the degree to which an innovation is perceived as difficult to control (Moore and Benbasat 1991). Generally, users are more likely to choose channel(s) that they perceive as easier to use. Users search for technology that will increase their performance, taking into account how much effort is required to use it. For instance, users tend to consider mobile applications difficult to use because mobile devices have small display screens and small keyboards (Kim et al. 2009).

Therefore, according to expectancy theory, perceived complexity directly affects users' intentions to switch from other banking channels to m-banking. If users perceive m-banking to be complex to use, their expectancy will decrease; that is, they will consider that too much effort is required to switch to m-banking. Thus, we hypothesise the following:

H3: If users perceive m-banking to be complex, they will have a low intention to switch from other banking channels to m-banking.

Perceived Self-Efficacy (PSEF)

Perceived self-efficacy is users' beliefs in their abilities to use technologies (Compeau and Higgins 1995). Brown and Venkatesh (2005) suggest that users will not adopt a new technology for household use until they are convinced that they are able to use it properly. Luarn and Lin (2005) demonstrate the influence of self-efficacy on the intention to use m-banking. Users will view any difficulties associated with switching to m-banking as a 'challenge'. Whether they take up the challenge depends on their self-efficacy (Kim 2009).

Following expectancy theory, we argue that users with high self-efficacy will have high expectancy; that is, they will be more excited about the outcomes (e.g., mobility) of switching to m-banking. Users with low self-efficacy will have low expectancy; that is, they will feel discouraged and be more inclined to stick to their current channel. Thus, we hypothesise the following:

H4: If users perceive a high level of self-efficacy, they will have a high intention to switch from other banking channels to m-banking.

Instrumentality

In general, users want to avoid risk and reduce losses (Kahneman and Tversky 1979). Their decision-making and behaviour also tend to be averse to risk and loss because uncertain situations give rise to feelings of

incompetence (Brown and Venkatesh 2005). If users think m-banking is risky, they will have negative psychological perceptions and be reluctant to make the switch. In this study, we use a construct—perceived risk—to capture this characteristic. Moreover, when deciding whether to switch to a new technology, users often assess the financial cost of using the technology relative to their earnings ('perceived financial resources').

Perceived Financial Resources (PFR)

Perceived financial resources are the extent to which users believe they have financial resources to pay for the costs of using a technology (Luarn and Lin 2005). In the m-banking context, these costs include the handset, communication time and subscription fees (Wang et al. 2006). Prior research shows that perceptions of adequate resources for acquiring hardware and software can facilitate an intention to use new technology (Mathieson et al. 2001).

Given that the cost of accessing mobile and wireless services is higher than that of accessing wire-based Internet services, we anticipate that financial considerations might influence users' behavioural intentions to switch to mbanking from other channels. Following expectancy theory, we argue that if users perceive that they are financially sound; that is, that they have sufficient financial resources, they will be more inclined to use mbanking service for convenience and/or higher performance. Overall, we anticipate that users with high financial resources are more likely to switch to mbanking than users with lower financial resources. Thus, we hypothesise the following:

H5: If users perceive that they have the necessary financial resources, they will have a high intention to switch from other banking channels to m-banking.

Perceived Risk (PR)

Perceived risk refers to the risk of loss of privacy (via disclosure of personal and financial information) and the risk of monetary loss (Pavlou 2003). Prior research suggests that risk plays an important role in electronic commerce transactions (Pavlou 2003). According to expectancy theory, users want to be more instrumental by trying to avoid risk when deciding on a new technology. As such, users may be reluctant to provide sensitive personal information and to conduct financial transactions via m-banking (Luarn and Lin 2005).

New technology-enabled services may exhibit unfamiliar and ambiguous stimuli, creating uncertainty for users. M-banking is a relatively new technology-enabled channel and users may believe that switching to m-banking is a risky decision. Thus, we hypothesise the following:

H6: If users perceive m-banking to be riskier than other channels, they will have a low intention to switch from other banking channels to m-banking.

The research model is depicted in Figure 1. We collected 493 data points to test the above six hypotheses, and our survey design and findings are presented below.

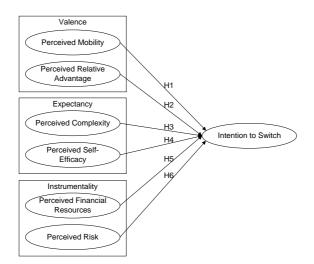


Figure 1: Research Model

METHODOLOGY

We conducted a survey to collect the data to test the above hypotheses. We chose the survey method over other methodological alternatives because it is an appropriate method for researching self-reported beliefs and attitudes (Neuman 2006). The survey approach also allows us to collect data from mobile phone users in a natural setting

without any interference. We collected data on demographics, perceptions of m-banking and intentions to switch to the m-banking channel.

Participants

The survey was conducted at a public university event attended by students, their families, visitors and academics. Two thousand paper questionnaires were distributed and we received 493 usable responses, which is an overall response rate of 24.65%. Of the 493 respondents, 67% were students, 69% were male and 68% were aged under 26. The survey participants were mobile phone users who also used some form of banking service. Bank users were an appropriate sample because they were reasonably knowledgeable about banking services and understood their own needs for various banking services. They were also potential or current users of m-banking services. Thus, our sample is capable of giving reliable and useful responses on both mobile technology and m-banking.

Instrument Development

Our questionnaire contained several seven-point Likert scale questions for respondents to report their general perceptions of m-banking and their intention to switch to m-banking. The items were measured on a seven-point Likert scale (1 = strongly disagree, 7 = strongly agree). The independent variables in this study were perceived mobility, relative advantage, complexity, self-efficacy, financial resources and risk. The dependent variable was users' intentions to switch from other banking channels to m-banking. All the perceptual items were adapted from validated scales used in previous studies. To ensure content validity, we referenced several survey instruments in developing our questionnaire: the technology acceptance model (Davis 1989), the perceived characteristics of innovating (Moore and Benbasat 1991), and the innovation diffusion theory (Rogers 1995). The perceived mobility scale was adapted from Hong et al.'s (2008) study. This approach safeguards against concerns about social desirability bias or acquiescence of self-reported data. All items were phrased with respect to the m-banking context of the study.

To ensure the face and content validity of our measures, we reviewed the instrument with two IS academics who are experts in scale development. We conducted a pilot test of five individuals who had rich experience in mobile commerce, and who were actively using technology-based bank services (three students and two professionals), in order to assess the readability, length and clarity of the instrument. It took the participants approximately 20 minutes to complete the questionnaire. Based on their feedback, we refined the instrument further, presented them with our modified questionnaire, and they confirmed that there were no unclear statements in the modified version.

FINDINGS

The properties of the theoretical model were tested following a measurement and structural approach (Gefen et al. 2000). We used partial least square (PLS) to validate the measurement and structural properties of the model. PLS was a suitable choice for the analysis given that our research was oriented to developing theory and new measures (Chin 1998).

Measurement Validation

We first assessed the reliability, discriminant validity and convergent validity of the constructs. We used internal consistency scores to assess reliability. Table 1 shows composite reliability scores. The internal consistencies of all constructs were considered acceptable because they all exceeded the recommended threshold of 0.70 (Gefen et al. 2000).

We used two criteria to assess discriminant validity. First, we checked whether the items loaded much higher on their hypothesised factor than on other factors (own loadings are higher than cross-loadings). All items in constructs loaded more highly than their cross-loadings. Second, we checked whether the square roots of each factor's average variance extracted (AVE) were larger than its correlations with other factors (Chin 1998). As shown in Table 1, the square root of all AVEs was much larger than all other cross-correlations. Therefore the discriminant validity was satisfactory.

We used two criteria to assess convergent validity. First, we assessed the AVE for all constructs. Convergent validity was confirmed because the AVEs for all constructs were higher than the recommended threshold (> 0.5). Second, we assessed the significance of item loadings on their factors. As all items loaded highly on their constructs, it confirmed that convergent validity was satisfactory. Together, these findings suggested adequate convergent and discriminant validity.

	Mean	Reliability	PCMX	PFR	PM	PR	PRA	PSEF	ISW
PCMX	3.46	0.82	0.83						
PFR	4.09	0.91	0.32**	0.92					
PM	5.67	NA	-0.14**	-0.14**	NA				
PR	4.30	0.85	0.27**	0.19**	-0.00	0.81			
PRA	5.34	0.90	-0.06	-0.11**	0.50**	-0.05	0.80		
PSEF	5.30	0.84	-0.00	-0.07	0.38**	-0.07	0.46**	0.80	
ISW	5.41	0.90	-0.16**	-0.05	0.58**	-0.05	0.53**	0.49**	0.90

Table 1. Descriptive Statistics, Correlation Matrix, and AVE of Principal Constructs

**p<0.01. Diagonal elements (in bold) represent square root of AVE. NA (Not applicable).

Our research was vulnerable to common method biases because the survey data were self reported, and dependent and independent variables were measured simultaneously. To assess common method biases, we conducted a Harman's one-factor test (Podsakoff et al. 2003). Specifically, we performed an exploratory factor analysis on all variables and found that the threat of common method biases was low.

Structural Validation

The total variance explained by the intention to switch from other channels to m-banking was 48% (R2 = 0.48). As hypothesised, perceived mobility has a significant main effect on users' intentions to switch from other channels to m-banking ($\beta = 0.36$, p < 0.01), thus supporting H1. Results show that users who perceive the high mobility of m-banking are more likely to make the switch.

Perceived relative advantage also has a significant effect on users' intentions ($\beta = 0.24$, p < 0.01), which supports H2. Results show that users who perceive that m-banking provides them with a relative advantage are more likely to switch to m-banking from other banking channels.

Perceived complexity has a significant negative effect on users' intentions to switch from other channels to mbanking ($\beta = -0.11$, p < 0.01), thus supporting H3. Results show that users who perceive m-banking to be complex are less likely to make the switch.

Perceived self-efficacy has a significant effect on users' intentions ($\beta = 0.25$, p < 0.01), thus supporting H4. Results show that users who perceive a high level of self-efficacy are more likely to switch to m-banking.

Together, perceived mobility, relative advantage, complexity and self-efficacy account for 48% of the variance in users' intentions to switch from other banking channels to m-banking. Surprisingly, perceived financial resources ($\beta = 0.08$, p > 0.10) and perceived risk ($\beta = -0.01$, p > 0.10) have no significant effect on users' intentions to switch from other channels to m-banking. Thus, H5 and H6 were not supported in this study.

DISCUSSION

In this section, we present our key findings, followed by the theoretical and practical contributions.

Key Findings

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Table 2 summarises the results of the tested hypotheses.

Hypotheses	p value
If users perceive m-banking to be of high mobility, they will have a high intention to switch from other banking channels to m-banking.	< 0.01
If users perceive m-banking to be of high relative advantage, they will have a high intention to switch from other banking channels to m-banking.	< 0.01
If users perceive m-banking to be complex, they will have a low intention to switch from other banking channels to m-banking.	< 0.01
If users perceive a high level of self-efficacy, they will have a high intention to switch from other banking channels to m-banking.	< 0.01
	If users perceive m-banking to be of high mobility, they will have a high intention to switch from other banking channels to m-banking. If users perceive m-banking to be of high relative advantage, they will have a high intention to switch from other banking channels to m-banking. If users perceive m-banking to be complex, they will have a low intention to switch from other banking channels to m-banking. If users perceive a high level of self-efficacy, they will have a high intention to

Table 2. Summary of Findings

- H5: If users perceive they have the necessary financial resources, they will have a n.s. high intention to switch from other banking channels to m-banking.
- H6: If users perceive m-banking to be riskier than other channels, they will have a low n.s. intention to switch from other banking channels to m-banking.
 n.s. (Not supported.)

Perceived mobility has the strongest path coefficient of all the factors in our model. Hence, perceived mobility is the key motivating factor for users to switch from other banking channels to m-banking. This suggests that users who have positive valences to bank anywhere and anytime will have a high intention to switch to m-banking (H1). Perceived relative advantage, as expected, is another important predictor of users' intentions to switch to m-banking; that is, if users have positive valence for a new technology over an incumbent technology, they will be motivated to switch to the new technology (H2).

As expected, perceived complexity is negatively associated with users' intentions to switch to m-banking; that is, perceived complexity increases effort expectancy and, consequently, de-motivates users from switching to m-banking (H3). Conversely, perceived self-efficacy decreases users' effort expectancy; that is, it increases their confidence in their ability to carry out the action successfully and, consequently, increases the likelihood of switching banking channels (H4).

Based on prior literature, we expected perceived financial resources to be positively associated with users' intentions to switch to m-banking. However, contrary to our hypothesis, perceived financial resources had an insignificant effect on users' intentions to switch to m-banking (H5). This result can be explained by Venkatesh and Brown's (2001) suggestion that cost-related factors may not be significant if the cost is perceived as lower and the usefulness is perceived as higher. In the context of this study, since perceived mobility and relative advantage have emerged as highly influential, the relationship between perceived financial resources and the intention to switch to m-banking may have become insignificant. Further, based on prior literature on users' risk perceptions, we expected perceived risk to be a significant effect on the intention to switch. However, contrary to our hypothesis, perceived risk had an insignificant effect on the intention to switch (H6). One possible reason for this result is that the effect of perceived risk on the intention to switch diminishes if users believe a new technology will be useful and convenient (Curran and Meuter 2007). However, this finding warrants caution in some contexts, as most of our data were collected from university students who were likely to be more technologically well informed than the general population.

Theoretical Contributions

This study contributes to the existing literature in several ways. First, it signifies an important step in the development and testing of a theory related to users switching from one channel to another in order to conduct their activities via technology-mediated alternatives. It is an attempt to overcome the current IS research trend of examining specific technologies in isolation. Specifically, we use banking as our research context. The study also augments prior studies on m-banking, which predominantly used the technology acceptance model to study users' technology adoption behaviour. However, as mentioned previously, m-banking is not a standalone technology; it is one option in an array of banking services. Hence, we believe that switching behaviour from another banking channel to m-banking is more appropriate in this context. Further, the study contributes to emerging domestication research of MDSs by introducing a complementary theoretical framework, built on expectancy theory, to theorise the channel-switching issue in banking.

Finally, in this era of technology-mediated channels, individuals are not restricted to utilise one single channel exclusively. The study attempts to provide a holistic picture of mobile users' behaviour along this line. Specifically, we theorise the effects of perceived mobility, relative advantage, complexity, self-efficacy, financial resources and risk on users' intentions to switch. Some variables (e.g., perceived self-efficacy) relate to user control characteristics, whereas some variables (e.g., perceived mobility) relate to new technology characteristics. These variables belong to different categories in expectancy theory (i.e., valence, expectancy and instrumentality). Overall, our research model presents a big picture of different types of variables in the m-banking context.

Practical Implications

The results of this study are valuable and, in the midst of the proliferation of SSTs and the growth of the online services industry, they are relevant to retail managers, wireless site designers and consumers. Specifically, the study is important for managers in banks who are considering the implementation or expansion of m-banking as an SST in their service delivery, as it sheds light on factors that might be salient to targeted users. The introduction of m-banking offers customers a variety of banking options, and this study helps to better understand why users may switch to m-banking.

M-banking can provide tremendous cost savings for banks if it is widely used; however, it can be very costly if it is not implemented and introduced correctly. When IBM shifted their call centre service to an SST channel, they saved US\$2 billion (Burrows 2001). However, a Forrester Research study found that 41% of firms that were studied observed no return or savings on their self-service investments (Curran and Meuter 2007; Xiangpei et al. 2008). Presumably, firms do not share a common understanding of how to leverage SST. The study sheds light on the technological features which are important to attract users to mobile SST.

Factors such as perceived mobility and relative advantage have been found salient in switching behaviour. In a similar vein, highlighting the value that can be derived from using m-banking (i.e., valence) represents a potentially fruitful exercise. To encourage individuals to utilise m-banking, service providers should build the perception that conducting a number of activities will result in greater rewards such as cost and time savings, and ubiquity. Communicating these types of rewards, such as 'Free your time', which was used by one bank, is likely to sway users towards the mobile channel, generating a competitive opportunity for MDS providers.

Perceived self-efficacy and complexity have been salient in driving and inhibiting switching behaviour, respectively. Service providers should design marketing messages such as 'You are in control' to supplement efficacy beliefs and ease users' anxiety about difficulty (Looney et al. 2008). Self-efficacy can also be manipulated through online education, training and support; thereby developing a 'Do it yourself' mentality by inducing individuals to believe that they can take advantage of mobile SST (Looney et al. 2008). The availability of around-the-clock online help and customer service may put individuals at ease and increase their sense of confidence so they can utilise m-banking services successfully (Looney et al. 2008).

Finally, we are already in the decade of wireless technology, and firms must plan for a mobile future. As users continue to become more familiar and comfortable with m-banking, it is critical that banks and mobile service providers understand how to best offer m-banking services. Overall, the study generates useful insights into the strategies that will enable banks to increase their market share in a highly competitive environment. It will help managers to better understand mobile users' behaviour, and invest in 'suitable' m-banking infrastructure.

Limitations

This study is not without limitations. First, 67% of the survey respondents were students; however, we consider this a legitimate sample because most mobile users are young (Okazaki 2006). Future work could replicate this study with office workers or homemakers. Second, the current model only explained 48% of the variance in users' intentions to switch. Future work should explore more variables to increase the predictive power of the model. Finally, we focus on m-banking in the study because it is a 'killer application' in mobile commerce (Economist 2007; Xiangpei et al. 2008). However, is our model applicable in other channel-switching contexts? It would be useful to test the relationships found here in contexts such as physical versus mobile ticket purchasing to determine whether the same switching behaviour is observed. More research needs to be conducted to generalise this finding.

CONCLUSION

The current work has investigated the effects of perceived mobility, perceived relative advantage, perceived complexity, perceived self-efficacy, perceived financial resources, and perceived risk on intention to switch to mbanking from other channels. We used concepts from expectancy theory—valence, expectancy, and instrumentality—to categorise our variables and develop our hypotheses. Using expectancy theory as a theoretical frame enabled us to put the variables into perspective and to more clearly identify the role each variable plays in switching. This work represents a first step towards understanding technology-enabled switching behaviour. It also sheds lights on the factors influencing m-banking switching behaviour for banks and mobile service providers. An improved understanding of why mobile users switch to m-banking will be of benefit to businesses as we expect to see many SST advancements over the next few years. It is expected that banks and MDS providers will be increasingly concerned and excited about migrating users toward mobile SSTs. This research and other efforts to better understand user switching behaviour should help firms better utilise these powerful service delivery technologies and stimulate more mobile financial activities.

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