

STUDY ON AWARENESS OF TECHNOLOGY ADOPTION MODEL AND INDIAN CONSUMERS MOBILE BANKING

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ABSTRACT

Information technology is taken into account because the key drivers for the changes going down round the world. Mobile banking is that the latest and most innovative service offered by the banks. The transformation from the normal banking to e-banking has been a 'leap' amendment. The evolution of e-banking started from the employment of machine Machines (ATMs) and telephone banking (tele-banking), direct bill payment, electronic fund transfer and therefore the revolutionary on-line banking. This study determines the consumer's perspective on mobile banking adoption.

Keywords: *Mobile Banking, Information Technology Adoption Model (TAM), Perceived Usefulness, Ease of Use, Awareness.*

I - INTRODUCTION

The creation of and speedy advances in, technology-based systems, particularly those associated with the internet, square measure resulting in elementary changes in however companies act with customers (Ibrahim E, Joseph M and Ibeh K). Movable usage has unfolded in an exceedingly very broad manner each in developing and developed countries. With mobile communications already as a main case for leapfrogging ancient infrastructure, mobile banking (M-Banking) has nice potential for extending the supply of economic services to unbanked folks through a technology that's each acquainted and widespread.

One of the primary business applications of the mobile commerce was mobile banking (m-banking). The rapid growth of mobile applications has given rise to a brand new term: m-commerce. M-commerce is outlined because the application of wireless communications networks and devices to the execution of transactions with cost – either direct or indirect. Web banking and mobile banking (m-banking) has become the self-service delivery

channel that enables banks to produce data and provide services to their customers with a lot of convenience via the web services technology. The new world of electronic banking is dynamical day by day. It's necessary to know the customer's perception on mobile banking. Today, many financial services organizations square measure speeding to become a lot of customer centered. Several corporations within the monetary services sector are fast to implement web capabilities, and electronic service is changing into a viable option for interaction between monetary service suppliers and their customers. The difficult business method within the financial services pressurized banks to introduce alternate delivery channel to draw in customers and improve customers' perception.

Many banks have enforced web and mobile banking to supply their customers a spread of on-line services with a lot of convenience for accessing data and making transactions. Client satisfaction and client retention square measure more and more developing into key success factors in e-banking. Technology, specifically, has been increasingly used in commission organizations to reinforce customer service quality and delivery, cut back prices, and standardizes core service offerings. There will be Brobdingnagian acceptance of on-line banking with the passage of time with growing awareness and education an excellent several people square measure shifting to on-line banking and square measure promptly accepting the utility of this bounty. On-line banking service permits customers to manage their accounts from any place at any time for minimum cost; it offers plenteous compensation to the shopper in terms of worth and ease.

II- REVIEW OF LITERATURE

Studies on Information Technology Adoption Model

Willis (1995) in a study stated that forceful imposition of information technology on faculty was not conducive to learning, Further; placing pressure on faculty to adopt information technology may actually have a negative effect on faculty's adoption to adopt new IT methods.

Mackey and Jacobson, (2011) et al. stressed the need for spreading IT literacy a compulsory skill to be achieved by everyone. The above study differentiated IT literacy and IT Fluency.. Social media environments and online communities are innovative collaborative technologies that challenge traditional definitions of information literacy. Meta literacy is an overarching and self-referential framework that integrates emerging technologies and unifies

multiple literacy types. This redefinition of information literacy expands the scope of generally understood information competencies and places a particular emphasis on producing and sharing information in participatory digital environments.

Gayol and Boubsil (2009) conducted a study on digital fluency pointed out that in less than four decades, information and communication technology (ICT) has changed the way people work, communicate and learn. Digital competencies are now essential in the knowledge society and universities all over the world are adopting ICT standards to enhance these competencies regardless of the instructional modality used (online, blended or face-to face). Digital fluency has become a strategic goal in education, since knowledge workers are required to intensively use information technology products and services. A vast amount of literature assessing instrumental ICT skills is available at all levels of education and training. However, reports exploring digital competencies related to academic tasks in graduate education are scarce, particularly those addressing ICT fluency beyond the notion of technical literacy. The above study reports the level of digital fluency found amongst faculty of a graduate distance education institution. The ability of faculty to access and communicate with students at a distance is explored. A customized survey evaluating the ICT skill levels associated with specific mentoring tasks was designed and applied to a random sample of faculty at three graduate colleges. The analysis of the institutional context provided a strong foundation for professional development and policy making in the three graduate colleges.

Sardone (2011) conducted a study on using a causal-comparative research method, data from 120 undergraduate students studying computer concepts were analyzed to determine the relationship between learning environment, IT fluency, and course satisfaction. The purpose of the above research was to examine the relationship, if any, between traditional and constructivist learning environments to the development of IT fluency and course satisfaction in a course in which students were learning to become IT fluent under a revised definition. The above study is among the few quantitative studies designed to analyze the factors influencing IT fluency in the general college undergraduate population. Results suggested that in learning environments based on active learning strategies, IT fluency was achieved and course satisfaction was significantly higher regardless of preferred learning style.

III- OBJECTIVES

Objectives of the Studies

1. To measure the Technology Acceptance variations on Gender, Age and Education among the consumers.
2. To find out the association between the Technology Adoption levels and awareness of the Mobile Banking among the consumers.

IV- RESEARCH MODEL AND HYPOTHESES

Perceived usefulness and perceived ease of use are the two components of Technology Acceptance Model (TAM). According to Davis (1989), "perceived usefulness is the extent to which a person believes that using a particular system will enhance his or her performance, while perceived ease of uses the extent to which a person believes that using a particular system will be free of effort". TAM has been widely used by information system researcher; there is a common agreement among them that the model is valid in predicting the individual's acceptance of new technologies (Segars, Grover, 1993 and Davis, 1989) Perceived usefulness and perceived ease of use is significant factors affecting acceptance of an information system or new technologies. Prior research has empirically found positive relationship between perceived ease of use and perceived usefulness as critical factors on the use of e-banking (Poon, 2008, Venkatesh Davis, 1996, and Chau, 2001). Hence an application perceived to be useful perceived to be easier to use than another is more likely to be accepted by users. By applying these into online banking context we hypothesize:

H1: Perceived usefulness has a positive effect on intention to adopt and use MB.

H2: Perceived ease of use has a positive effect on intention to adopt and use MB

Adoption is the acceptance and continued use of a product, service or idea. According to (Rogers, and Shoemaker, 1971) and (Sathye, 1999).consumers go through "a process of knowledge, persuasion, decision and confirmation" before they are ready to adopt a product or service. The adoption or rejection of an innovation begins when "the consumer becomes aware of the product". Consumers will seek out those financial products and suppliers which offer the best value for money and they are educated about it. Hence, for adoption of mobile banking, it is necessary that the banks offering this service make the consumers aware about the availability of

such a product and explain how it adds value relative to other products of its own or that of the competitors. Consumers must become aware of the new brand or technology. An important characteristic for any adoption of innovative service or product is creating awareness among the consumers about the service/product (Sathye, 1999). The amount of information consumers have about online banking has been identified as a major factor impacting the adoption. According to (Sathye, 1999). While the use of online banking services is fairly new experience to many people, low awareness of online banking is a major factor in causing people not to adopt online banking. In an empirical study of Australian consumers found that consumers were unaware about the possibilities, advantages/disadvantages involved with online banking. Hence, we posit that:

H3: Awareness about MB has a positive effect on intention to adopt and use MB

Perceptions of risk are a powerful explanatory factor in consumer behavior as individuals appear to be more motivated to avoid mistakes than to maximize purchasing benefits (Mitchell, 1999). “The construct Perceived Risk reflects an individual’s subjective belief about the possible negative consequences of some type of planned action or behavior, due to inherent uncertainty. (Pavlou, 2003). Refers to perceived system risk as the overall amount of uncertainty perceived by an organization in a particular purchase situation. The Perceived Risk associated with online transactions may reduce perceptions of behavioral and environmental control, and this lack of control is likely to negatively influence e-commerce usage intentions. E-commerce applications should be enhanced by reducing the level of perceived risk (Belkhamza, and Wafa, 2009). Similar is with m-commerce applications. Owing to the open Internet technology infrastructure and lack of sufficient laws concerning m-commerce activities, the trust and trust related-concepts (that is, perceived risk, credibility, image and reputation) have been integrated with the adoption models to explain MB adoption behavior. Diffusion of innovation literature is often silent on perceived risk as a factor influencing the diffusion of an innovation, despite adoption behavior often being a process of dealing with the uncertainty about incorporating an innovation into ongoing practice (Andrews, and Boyle, 2004). Services are inherently more risky than products and that the major reason for this is the higher levels of uncertainty which are associated with services (Mitchell, 1999, Mitchell, and Greatorex, 1993, Mitchell and Greatorex, 1990, Polatoglu, and Ekin, 2001) also found that perceived risk was one of the major factors affecting

consumer adoption, as well as customer satisfaction of mobile banking services. Perceived risk usually arises from uncertainty. Hence we hypothesize:

H4: Perceived risks have a negative impact on intention to adopt and use MB.

V- RESEARCH METHODOLOGY

The key goal of this paper is to assess those components that control the idea of clients towards portable banking and their developing propensity towards the on the web money related foundations. A study instrument as survey was created through information gathered from past investigations on acknowledgment of portable banking. We built a few inquiries in the survey dependent on the goals of the exploration. **Likert scale** is utilized so as to recognize the respondents' observations towards versatile banking appropriation. During the meetings we looked for general data from the administrators about portable banking and approached them to talk about the explanations behind endeavor portable banking and to feature versatile financial improvement challenges. We additionally requested that they talk about the issues important to the eventual fate of the activity. The surveys were based on clients' goal to embrace portable banking.

TABLE I: DEMOGRAPHIC VARIABLE

Demographics	Items	No. of Respondent	Percent
Gender group	<i>Male</i>	42	78.84
	<i>Female</i>	15	21.15
Age group	<i>20=30</i>	44	82.7
	<i>31-40</i>	5	11.5
	<i>41-50</i>	2	3.8
	<i>>50</i>	1	1.9
Education	<i>graduate</i>	17	28.8
	<i>Postgraduate</i>	27	55.8
	<i>Ph.D</i>	6	11.5
	<i>Other</i>	2	3.8

VI- SAMPLING DETAILS

Convenience sampling method was used. It is a type of non-probability sampling which involves the sample being drawn from that part of the population which is close to hand. That is, a sample population selected because it is readily available and convenient. The reasons of using

this sampling type are twofold. First, it offers an easy way to obtain the raw data for the further analysis. Second, it saves times and costs since the respondents can be randomly selected. Choosing this campus is because of two reasons. First, those business and economics student are revealed with the knowledge of applied business and economics. At the same time, they are equipped with the knowledge of computer science, where the concept of mobile banking is not an alien for these students. Second, it was found that there is no study ever conducted in the campus, it leaves a motivation to the research to perform a study in order to investigate the students' adoption for mobile banking in the near future. Table I shows the profile of the respondents. The sample shows that the number of male (78.84%) respondents is higher than the number of female (21.15%) respondents. The sample shows that the largest age group that responded was from 20 to 30 years of age (82.7%), followed by age 31 to 40 (11.5%), then 41 to 50 (03.8%) and >50 (1.9%). In the education background more than 55% of the respondents were postgraduate students and more than 28% were graduate students and 11.5% were PhD students.

VII- DISCUSSIONS AND FINDINGS

Although adaptable banking gives adaptability in performing money related exchange, quick and simple, be that as it may people are as yet hesitant to receive the framework as a result of a few reasons. To start with, the security and protection are two components in the apparent hazard. Without a legitimate learning of the framework, people are not intrigued to test the framework. Seen helpfulness, convenience and customer mindfulness has positive effect on the expectation to receive portable banking while saw hazard has negative effect on it. Whenever on the web banking is seen as helpful, client's expectation to embrace it would be more prominent. In like manner bank clients are probably going to embrace portable financial when it is anything but difficult to utilize. This demonstrates bank clients stay their internet banking selection goal to the useful results and usability process of the framework. Further, the exploration instrument was tried for dependability utilizing Cronbach's coefficient alpha gauge

TABLE II: RELIABILITY RESULTS.

Determinants	No. of Items	Items of Reliability
PU	7	0.834
PEU	5	0.760
AW	7	0.836

PR	6	0.600
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The Cronbach’s alpha values for all dimensions range from 0.60 to 0.93, exceeding the minimum alpha of 0.6 (Hair, J., Anderson R., Tatham, and Black, W, 1998) thus the constructs measures are deemed reliable. Principal component factor analysis with a varimax rotation was conducted. The aim of factors analysis is to confirm the construct validity of the scales could be performed adequately by using principle component analysis. In order to reach this, the minimum factor loading of 0.6 on its hypothesized constructs is proposed (Nunnally, 1978). A number of analyses were conducted for factors analysis. Factor loading values were obtained using varimax rotation. According to the above table, most of the factor loading for each instrument exceeded 0.6, meeting the essentially significant level of convergent validity.

TABLE III: FACTOR LOADINGS ANALYSIS

Perceived Usefulness	Perceived ease of use	Consumer awareness	Perceived risk
0.680081	0.558357	0.850832	0.8337
0.681054	-0.577729	0.711179	-0.6582
PU	PUE	CA	PR
0.761725	0.537585	.0.6588387	0.7597
0.761725	0.537585	0.6588387	0.7597
PU	PUE	CA	PR
0.827245	0.569031	0.600542	0.6508
PU	PUE	CA	PR
0.664396	0.824878	0.662101	0.6795
PU	PUE	CA	PR
0.735373		0.662596	0.7418
PU		CA	
0.647373		0.658444	

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 6 iterations.

Using an even value greater than 1 as a selection criterion, four factors emerged. Each has cumulative frequency of 22.51, 41.63, 59.85 and 69.94 percent respectively. These character factors accounted for 69% of the variance and the factor loading for all items were greater than 0.6. Hence the results show that H1, H2, H3 and H4 are confirmed. The results are consistent and are supported by previous studies.

VIII- CONCLUSION

The result of this study shows that perceived usefulness, perceived ease of use, consumer awareness and perceived risk are the important determinants of mobile banking adoption. This study meets the desired objective; but it suffers from one setback. Study concludes that majority of customers are accepting online banking because of many favorable factors. Analysis concluded that usefulness, ease of use of the system awareness about mobile banking and risks related to it are the main perusing factors to accept online banking system. These factors have a strong and positive effect on customers to accept mobile banking system. The relatively small size of the sample limits generalization of the outcome of the study. The study is concentrated on a particular location and hence the result may vary with location and the demography of the people. Similar study can be conducted in other colleges and universities and results can be compared.

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***** The ***** Survey ***** Ends *****

