

# THE PERCEPTION OF MOBILE BANKING ADOPTION AMONG THE STUDENTS COMMUNITY: SPECIAL REFERENCE TO EASTERN UNIVERSITY

Maheswaranathan, S. and Vijayakiruthika, S.

*Department of Economics, Faculty of Commerce and Management,  
Eastern University, Sri Lanka.*

## **Abstract**

*The banking industry gained the opportunity to improve the quality of services offered to their customers with a mechanism that marked the way for the introduction of sophisticated services at a negligible cost. M - Banking is one of the above and plays important role in various daily and routine activities. Banking transaction is one of a transaction process which is transformed by information technology through mobile phones. Mobile banking (M-banking) has a dramatically growth rate according to the increasing number of mobile device users. In recent years, a Mobile banking has become a useful platform to easily access banking services. Therefore, the intended of this study is to find out the factors that contribute to the perception of Mobile banking for the student's community. Using convenient sampling method 100 students were selected from six faculties of Eastern University and primary data was collected through administrated structured questionnaire. Considering the three variables such as Perceived usefulness, Perceived ease of use, and Perceived security concern, this study was carried out among the students community. The main findings of this study are high level of perception of adapt of Mobile banking among the students community.*

**Keywords:** M - Banking (Mobile banking), SMS banking.

## **1. INTRODUCTION**

Mobile banking is used in many parts of the world with little or no infrastructure, especially remote and rural areas. The introduction of Information Technology (IT) has led to the fast growth and development in the service sector making it one of the leading worldwide (Gonza'lez, Dentiste, & Rhonda, 2008).With that the Mobile banking have become increasingly popular last few years and it is a way for the customer to perform banking actions on his or her cell phone or other mobile device. Also it is a quite popular method of banking that fits in well with a busy, technologically oriented lifestyle. The opportunity to use advanced technologies in service delivery have created challenges to developers of financial services; competitive advantage can be gained in form of costs reduction or customer satisfaction increase or lost investing in wrong technologies.

Mobile text and alert is the simplest, allowing the user to transfer funds or access account information via text message. Texting terminology varies from bank to bank, but the overall function is generally the same. Users need to first register and verify their phone numbers with their bank, but once that's completed, they can also set up alerts to let them know about negative balances or deposit confirmations.

For consumers, mobile banking is a great way to efficiently manage the occasional administrative task on the go. For small and mid-size business owners, employees and students mobile banking gives the precious gift of time. Closing a sale, meeting new customers or smoothing back office shipping glitches are important revenue producers. Waiting in line at the bank to deposit a wad of checks is not. Mobile devices have become the fastest adopted consumer product to date (Dholakia et al. 2003). The use of mobile phones for the implementation of electronic business transactions is additionally boosted by increasingly new technologies, such as wireless application protocol (WAP), Bluetooth, and technological developments are changed daily. Mobile banking services or operations are still in their immaturity, leaving a great deal of room for development. Therefore this study intends to analysis insight of the aspects of student's perception on adaption of mobile banking. This field of research is very new in students as well. In fact, the potential of SMS banking is very obvious in student's community. As noted earlier, a dramatic increase in the number of mobile phone usage among students can be become as a yardstick to promote SMS banking as part of banks service.

## **2. PROBLEM STATEMENT AND OBJECTIVES OF THE STUDY**

Mobile banking is defined as "a channel whereby the customer interacts with a bank via a mobile device, such as a mobile phone or personal digital assistant (PDA)" (Barnes & Corbitt, 2003). With the improvement of mobile technologies and devices, mobile banking has been considered as a salient system because of such attributes of mobile technologies as ubiquity, convenience and interactivity. Mobile devices can be used in a variety of payment scenarios, such as payment for digital content (e.g., ring tones, news, music, or games), tickets, parking fees and transport fares, or to access electronic payment services to pay bills and invoices. These changes from applying technology in many ways have shifted the form of traditional banking transactions to mobile banking (M-banking) that emphasizes on the more convenience of customer usage.

It is lack of literature in Sri Lanka to examine the customers perception of M-banking adaption based on the above facts, it has become important to validate the impact of M-banking perception of (SMS banking) in the higher education sector in Sri Lanka specially Eastern University. This in turn questions about a study of (students') perception regarding the M-banking or SMS banking. Therefore, the primary objective of this study is to examine the perception of students regarding of SMS banking, further, as the secondary objective this study also focuses on identifying the level of perceived ease of use (PEOU), perceived of usefulness (PU), Perceived security concern.

## **3. LITERATURE REVIEW**

Koenig-Lewis et al. (2010) affirm that customer adoption remains the major barrier that hinders the development of m-banking. It is unlikely that banks will increase their investment in m-banking if customers do not see any advantages in it and if adoption is not widespread Suoranta and Matila (2004), argue that M-banking allows users to check account balance, make transaction history inquiries, transfer funds, pay bills, trade stock and manage portfolio of assets.

Sripalawat et al. (2011) collected 195 respondents and found subject norms to be the most influential factor, perceived usefulness to be the second influential factor, and self-efficacy to be the third influential factor in mobile banking adoption.

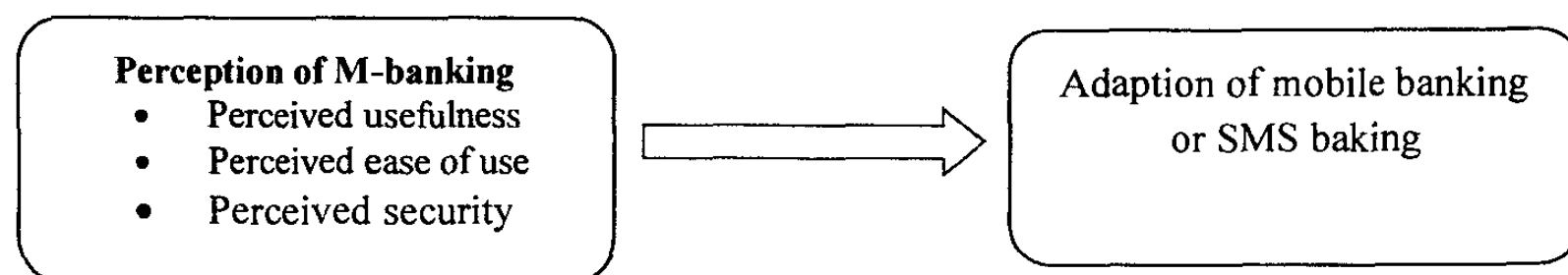
Dasgupta et al. (2011) first employed the exploratory factor analysis to identify seven backgrounds to behavioral intention toward the adoption of mobile banking. Thereafter, they utilized the regression technique to examine the effects of these antecedents on behavioral intention. Their empirical results supported six of seven antecedents, except for risk. The six antecedents were perceived image, perceived usefulness, perceived ease-of-use, perceived value, self-efficacy, perceived credibility, and tradition, which significantly influenced the behavioral intent to use mobile banking.

Ketkar et al. (2012) systematically plotted key mobile banking barriers and enablers on the two dimensional map. By treating driving power of enablers as positive and that of barriers as negative, their work identified “facility to get quick updates”, “time and cost saving”, “reach of telecom distribution” and “need for telecoms to improve customer retention” as the crucial drivers for the adoption of mobile banking.

Yang (2009) employed the Rasch measurement model and item response theory to survey 178 students from one of largest university in south Taiwan. He found that the speed of transactions and special reductions in transaction fees encouraged mobile banking adoption.

#### 4. CONCEPTUAL FRAMEWORK

Based on literature survey following conceptual framework has been developed. This conceptual framework establishes link between dependent and independent variables. The independent variable describes the participants perceived the mobile banking or SMS banking. The dependent variable describe the uses and adaption of mobile banking or SMS banking through the perceived the M-banking as three variables such as Perceived usefulness, Perceived ease of –use, and Perceived security Using Convenient Sampling method primary data was collected through structured questionnaires with closed statements measured with Likert’s scale (1-5 as strongly disagree, disagree, marginal, agree and strongly agree, respectively), with 100 students.



Source-(Conceptual model of Luarn and Lin)

#### 5. METHODOLOGY

##### 5.1 Data and Sampling

All together six faculties such as Faculty of Commerce & Management, Faculty of Arts & Culture, Faculty of Agriculture, Faculty of Health-Care sciences, Faculty of Science, and Swami Vipulananda Institute of Aesthetics Studies were included for the study proposes

from the Eastern university students community. Participants were selected from undergraduate students of Eastern University who have a mobile phone and a bank account.

## 5.2 Method of data presentation and Data Analysis

**Univariate analysis** is the simplest form of quantitative (statistical) analysis the analysis is carried out with the description of a single variable in terms of the applicable unit of analysis. According to this research univariate analyze use to analyze the data.

**Table 01: Evaluation Criteria for Mean Values**

<i>Range</i>	<i>Degree</i>
$1.0 \leq X \leq 2.5$	<i>Low level perception of M-banking</i>
$2.5 < X \leq 3.5$	<i>Moderate level perception of M-banking</i>
$3.5 < X \leq 5.0$	<i>High level perception of M-banking</i>

## 6. RESULTS

### Demographic Characteristics and preferences with M - banking users

The research Information obtained through 100 structured questionnaires. In the first section Demographic information was obtained such as gender, age, faculty institution, and year of study there and some preference questions regarding the M-banking are follows.

**Table 02: Summary of Background Information**

<b>Variables</b>		<b>Respondents(100)</b>
		Percentage (%)
Gender	Male	86
	Female	14
Age	<20	0
	20-24	82
	>25	18
Faculty institution	Faculty of Commerce & Management	20
	Faculty of Arts & Culture	19
	Faculty of Agriculture	20
	Faculty of Health-Care sciences	21
	Faculty of science	9.0

Variables		Respondents(100)
	Swami Vipulananda Institute of Aesthetics Studies	11
Students currently studying year	1 <sup>st</sup> year	24
	2 <sup>nd</sup> year	24
	3 <sup>rd</sup> year	25
	4 <sup>th</sup> year	23
How long have you used a mobile	Never	0
	<1 year	7
	1-2 year	11
	3-5 years	50
	>6 years	32
How often TXT message using a mobile phone during the day	None	2
	Once	5
	Twice	21
	Three times	26
	>Three times	46
How long have you used mobile banking based on SMS (TXT message)?	Never	6
	<1 year	40
	1-2 year	44
	3-5 years	6
	>6 years	4
How often do you check your bank balance or do bank transaction per week	None	11
	Once	21
	Twice	29
	Three times	17
	>Three times	22

### 6.1.1 Gender

According the table - 02 most students are male. Among the total 100 population 86% represent male and only 14% female.

### 6.1.2 Age

The above table shows among the total population 82% laid under the ages between 20 to 24 years, and students perception regarding the M-banking highly use by the age group of 20 to 24 than other age category. However, 18% of students fall under the age group of 25 years.

### **6.1.3 Faculty / Institution**

Among the 100 respondents, 20% of the respondents were found in Faculty of Commerce & Management, 19% in Faculty of Arts & Culture, 20% in Faculty of Agriculture, 21% in Faculty of Health-Care sciences, 9.0% in Faculty of science 11% respondents were Swami Vipulananda Institute of Aesthetics Studies.

### **6.1.4 Students currently studying year**

When investigating engages with M-banking, results showed that higher levels of using M-banking are third year students. 24% of the respondents were found to be 1<sup>st</sup> year students, 24% of the respondents were found to be 2<sup>nd</sup> year, 27% of the respondents were found to be 3<sup>rd</sup> year and 25% of the total populations were found to be 4<sup>th</sup> year.

### **6.1.5 Time duration of using mobile banking**

The survey next aimed at establishing respondents how long used a mobile phone. Most of the students (50%) used mobile phone 3-5 years and 32% of students used on mobile more than 6 years. 11% of students used mobile phone between one to two years, 7 % of respondents who indicated that they used mobile less than one year, here the conclusion is each and every students are using the mobile phone among the students community of Eastern university and they all adopt the mobile banking.

### **6.1.6 How often TXT message using a mobile phone during the day**

The survey also aimed at establishing respondents how often TXT message using a mobile phone per day. Above table shows 46% of the students used more than 3 times per day. 26%, 21% and 5% of students used TXT message using a mobile phone, three times per day, twice a day and per day respectively. Only 01% of the students not used the text message using a mobile phone.

### **6.1.7 How long have you used mobile banking based on SMS (TXT message).**

When investigating duration of using mobile banking based on SMS (TXT message), results showed that higher timed period used mobile banking based on SMS (TXT message) between 1-2 years 44%, 40% of the students used mobile banking based on SMS (TXT message) between one to two years and 40% of students used mobile banking based on SMS (TXT message) less than two years. 6% of students used mobile banking based on SMS (TXT message) on 3-5 years and some of the students didn't use the m-banking. Finally 4% of the students used TXT used mobile banking based on SMS (TXT message) more than 6years.

### **6.1.8 How often do you check your bank balance or do bank transaction per week.**

When investigating check respondents bank balance per week, results showed that higher timed check bank balance twice a day per week, 29% of the students check bank balance twice per week, 22% of the students check bank balance more than three days per week, 21% of the students check bank balance once a day per week and 17% of students check bank balance three times per week. And finally 11% of students didn't check the bank balance per week.

### **6.1.9 Mostly interested mobile banking activities.**

Through our study 97% of respondents are interested in checking their bank account balance. Another 45% of respondents revealed that because of the adaption of M-banking they are interesting to pay phone bills, and electricity bills etc. Transferring money between own accounts is the third selected interested activities (34.0%) of the respondents. Making

payments to other peoples least selected interested activities (24.0%) and finally changing respondents banking pin numbers activities (25%). This result shows that M-banking was applied in mostly for checking bank account balance. The following table describes the interesting activities of the M- banking users.

**Table 03: Mostly Interested Moble Banking Activities**

Banking activities would you mostly be interested	Percent (%)		
	Yes	No	Total
Checking bank account balance	97	3	100
Paying bills and ex (phone bills, electricity bills,)	45	55	100
Transferring money between own accounts	34	66	100
Making payments to other peoples	24	76	100
Changing my banking pin numbers	25	75	100

## 6.2 Research information

### Generating adaption of M- banking perception

The Adaption of mobile banking assessed with three dimensions: perceived usefulness, perceived ease of use, and perceived security concern. Perceived usefulness dimension has a mean value 4.44 with the standard deviation of 0.377. The mean value clearly showed that respondents have high level perception about M-banking. Perceived ease of use dimension has a mean value 4.22 with the standard deviation of 0.609. According to the findings, ease of use factor is highly influence the perception of M-banking. The students clearly understand the ease of use through the perception of m-banking. Perceived security concern dimension has a mean value 3.75 with the standard deviation of 0.978. According to the findings, Perceived security concern factor is highly influence the perception of M-banking.

The Perception of M-banking adaption includes the perceived usefulness, perceived ease of use, perceived security concern. In order to identify how the variable of perceived usefulness, perceived ease of use, Perceived security concern influence in the perception among the students in University. To know about how the respondents perceive the M-banking adaption among the students in the Eastern University, from the analysis it has the Mean value 4.13 and SD is 0.543. Therefore finally the perception of M-banking adaption is high level because the mean range is between (3.5<x>5.0).

**Table 04: Overall Measures of Dimensions**

Description	Independent variable Dimensions			Overall perception
	Perceived usefulness	Perceived ease of	Perceived security	
Mean	4.44	4.22	3.75	4.13
Standard Error of Mean	0.37	0.61	0.98	0.54
Std. Deviation	0.377	0.609	0.978	0.543
Variance	0.137	0.371	0.957	0.295
Minimum	3.00	2.00	1.00	3.00
Maximum	5.00	5.00	5.00	5.00
Decision Attribute	High Level	High Level	High Level	High Level

## 7. CONCLUSION

The purpose of this study had been to identify the factors influencing the perception of M-banking among the students community in the Eastern University. Specially three factors was analyzed. Each of the factors has certain dimensions with their indicators explicitly denoting the high level of perception. The student’s communities who are studying at the Eastern University are adapted in the M-banking that is encouraging their day to day banks transaction work properly. This adaption of M-banking definitely has a direct influence on their perception of personnel life.

Overall Perception about M-banking has mean value *4.13* and standard deviation *0.543* Study revealed that there is high level perception experience by the students community to adapt the M-banking from anywhere at any time. Especially in term of usefulness factor and ease of use factor has exhibited higher level of perception and security concern factor comparatively influence less than the another two variables of perception.

## 8. RECOMMENDATIONS

Based on conclusion some suggestions are put forward to students to improve the adaption of M-banking because there are so many advantage available in the M-banking therefore it s easy work for the bank activities so students definitely know and aware the benefits regarding the M-banking You can check your account balance, review recent transaction, transfer funds, pay bills. locate ATMs. deposit cheques. manage investments, etc it is easy and convenient and an ideal choice for accessing financial services for most mobile phone owners in the rural areas, save your valuable time that is important for students community and also carefully awareness of The loss of a person’s mobile device often means that criminals can gain access to your mobile banking PIN and other sensitive information.

## REFERENCES

- Agbemabiase George Cudjoe, Patrick Amfo Anim, Joseph Gerald Nii Tetteh Nyanyofio. (2015). Determinants of mobile banking adoption in the Ghanaian banking industry: a case of access bank Ghana limited. Department of Marketing, University of Professional Studies, and Accra, Ghana.
- Ali AlSoufi and Hayat Ali (2014). Customers' perception of M-banking adoption in kingdom of Bahrain: an empirical assessment of an extended tam model, Department of Information Systems, University of Bahrain, Bahrain. 1-4.
- Dhartibahen Mansukhabhai Chauhan, (2012). A study on customer perception towards mobile-banking: technology adoption and challenges, St. Stephen Institute of Business Management and Technology, Anand, Gujarat, India.
- Hamza Salim Khraim, Dr. Younes Ellyan AL Shoubaki, Aymen Salim Khraim.(2011) , Factors Affecting Jordanian Consumers' Adoption of Mobile Banking Services, Middle East University, Jordan. Giuseppe Tardivo , Milena Viassone\* , Gian Luigi Gola (2014) , Young Customers' Perception of the Quality of M-banking Services, Department of Management, University of Turin, Turin, , Italy.
- Hanudin Amin, Suddin Lada, Mohd Rizal Abdul Hamid and Geoffrey H. Tanakinjal Labuan (2005), A Preliminary Study on Students' Perception of SMS Banking:A Case at The Labuan International Campus-University Malaysia Sabah, International Campus-University Malaysia Sabah.
- Mattila, M. (2002). Factors Affecting the Adoption Of Mobile Banking Services, University of Jyvaskyla, Finland.