

FACTORS INFLUENCING CONSUMERS' TO ADOPT MOBILE BANKING

**C.B. Pavithra, Research Scholar, Ph.D Commerce,
SDNB Vaishnav College for Women**

**Dr. A.C. Ranganayaki,
Assistant Professor, SDNB Vaishnav College for Women**

Abstract

The innovation in banking sector has revolutionized the pattern of banking activities from conventional to convenience form. With the advent of information and communication technology the banking sector has transformed the nature of financial transactions from brick to click banking. India is moving towards the path of digital transactions and cashless economy. Superfluous use of Smartphone and intensification of international networking connectivity are the main cause for the preamble of mobile banking services. Mobile banking is an instant and convenient way to bank. The consumers adapt to modern technology of mobile banking due its numerous benefits such as expediency, time saving, omnipresence, etc. This study has empirically examined the factors affecting the consumers to adopt mobile banking services; preference to use mobile banking over net banking and consumers' experience. The results of this study revealed that respondents prefer to use mobile banking services using the banks app. And factors such as Transaction Speed, Compatibility, Connectivity, Security, Convenience and Benefits are influencing the consumers' to adopt mobile banking facility provided there is also a significant difference among the demographic profile of the respondents with the various factors affecting the consumers' perception towards mobile banking services

Key Words: *Mobile Banking, Smartphones, Consumers' Perception, Compatibility, Instant Transfer of Funds.*

1. INTRODUCTION

The new millennium has unveiled numerous opportunities in information and communication technology and has generated magnificent impact in Banking Sector. Banking scenario has been changing rapidly since 1990's. Anywhere and anytime banking has become the reality. Technology reformation has bought in the evolution of banking products and services in an innovative way with efficient processing channel and speedy delivery of products and services in the banking industry. The banking services are delivered virtually with the international networking facility. The development in the technology has improved so much that the banking transactions can be completed without even visiting the bank branches. Magnificent growth in the usage of Smartphone in the past decade is the prime cause for the innovation of mobile banking facility. Mobile banking services are offered by banks to their customers to perform their banking activities with the help of their Smartphone.

1.1 MOBILE BANKING

Mobile banking is termed as the process of performing financial/banking transactions by the customers with the help of a Smartphone. Mobile banking is a kind of service provided by the banks or financial institutions to its customers to perform banking activities such as checking up of accounts balance/statements, inter-bank and intra bank fund transfers, making payments for electricity bill, mobile bill, LPG, insurance premium, direct & indirect taxes, duties, school / college fees, payment of online shopping bills, etc., using a mobile device. In case of online banking the customers have to use bank website for transactions but mobile banking uses application software (Banks App) to conduct banking transactions.

Most of the banks, financial institutions, with Government support are focused on offering new technology-based services to their customers like mobile banking, mobile banking apps and e-wallets. Anand Natarajan (2016).

2. LITERATURE REVIEW

- **Shin et al., (2014)** The researchers explored the perception and preference of users of smart phone for mobile payments in the U.S and Korea. This study found that U.S consumers are more involved in mobile shopping whereas the Korean consumers are more involved in mobile banking. The regress analysis revealed that all factors (cost, security, convenience) are significantly influencing the usage intention of mobile payments. The researchers highlights that security is a strongly influencing factor in both countries for the frequent usage of mobile payment services.
- **Laforet & Li (2005)** This study revealed that unlike other country respondents the Chinese consumers did not consider convenience, ease of use, anytime-anywhere banking; rather they were motivated by the issue of security as a main factor for the adoption of internet banking. The obstacles of online banking were lack of computer and technical skills, perception of risk and the habit of using cash. Then, the hindrances for adopting mobile banking were the lack of awareness and knowledge about the benefits of mobile banking. The researchers suggest that bankers should provide awareness messages through advertising and other sources to encourage consumers to adopt online and mobile banking.
- **Nath & Chen (2008)** This study has discovered that there are two forms of mobile payment viz. cellular and contactless mobile payments. The result of the empirical analysis revealed that “compatibility” is highly influencing, “transaction speed and convenience” are moderately influencing the consumers’ intention to adopt m-payments, whereas consumers are highly concerned with the security and privacy issues. This study concurs that to boost the m-payment adoption, the cellular and contactless m-payments should be integrated in single device. The suggestion in this study is privacy and security issues should be checked to enhance the usage of m-payments.

3. OBJECTIVES

- To study about mobile banking
- To identify the factors affecting the consumers' perception to adopt mobile banking services.
- To determine the influence of socio-economic profile of the respondents on the various factors affecting the adoption of mobile banking system
- To offer suggestions to improve the mobile banking services.

3.1 RESEACH METHODOLOGY

This study is descriptive in nature. Both primary and secondary data have been used for analyzing the study. The present study is primarily focused on identifying the factors influencing the consumers to adopt mobile banking services.

3.2 Data collection: Primary data consist of original information collected for specific purpose of mobile banking users of different age groups and gender. Secondary data comprises of information that already available somewhere that has been collected for this purpose. The secondary data is obtained from the text book, research articles, journals and online sources.

3.3 Sampling design and size: Convenience sampling was used for collecting the responses from the mobile banking users. The questionnaire was issued to 690 respondents in Chennai City. Out of which 550 questionnaire were in usable condition and were taken up for the statistical analysis of the study.

3.4 Questionnaire Structure and Design: A well-framed questionnaire was used to collect the primary data. The Questionnaire was divided into three parts. Part I deals with the demographic profile. Part II relates to the mobile banking services custom. Part III consists of statements theater affecting consumers' perception towards the adoption of mobile banking services.

3.5 Statistical analysis: The primary data collected, were statistically analysed using SPSS 23.0. Tools like Percentage Analysis, Exploratory Factor Analysis and One-Way ANOVA was executed.

4. ANALYSIS AND FINDINGS

Analysis and findings is a process of evaluating the collected primary data and determining the inference of the study based on the statistical results.

4.1 Frequency Analysis:

The distribution of respondents based on their gender, age, marital status, educational qualification, occupational status and annual income was evaluated and the results of the same are represented in the following table:

Table: 4.1 Frequency Table representing the Demographic Profile of the Respondents

Demographic Variables	Categories	Frequencies	Percentages
Gender	Male	205	37.3
	Female	345	62.7
	Total	550	100.0
Age Group (in years)	Upto 20 years	14	2.5
	21-30 years	241	43.8
	31- 40 years	155	28.2
	41-50 years	102	18.5
	51 years and Above	38	6.9
	Total	550	100.0
Marital Status	Unmarried	198	36.0
	Married	352	64.0
	Total	550	100.0
Educational Qualification	High School	4	0.7
	Diploma	6	1.1
	UG	78	14.2
	PG	258	46.9
	Professional Degree	204	37.1
	Total	550	100.0
Occupational Status	Student	99	18.0
	Public Sector	32	5.8
	Private Sector	179	32.5
	Service Sector	49	8.9
	Professional	95	17.3
	Self-Employed	22	4.0
	Freelancer	16	2.9
	MNCs	15	2.7
	Home-maker	43	7.8
	Total	550	100.0
Annual Income	Below 1 Lakh	96	17.5
	1 Lakh – 3 Lakhs	178	32.4
	3 Lakhs – 5 Lakhs	146	26.5
	Above 5 Lakhs	130	23.6
	Total	550	100.0

Source: Primary Data

The frequency analysis reveals the distribution of respondents – Majority 62.7% are Female. In age wise classification majority 43.8% are in the age group 21-30 years. 64% of them are married. Educational wise Post Graduate constitutes 46.9%. 32.5% of them are Private Sector employees. Majority of the 32.4% of the respondents are earning annual income of ranging from Rs.1 Lakhs to 3 Lakhs.

4.1 (a) Preferred mode for mobile banking transactions:

In this study the preferred mode for mobile banking was divided into 2 types viz. banks websites and banks app. The following frequency table represents the preferred mode for mobile banking of the respondents.

Table 4.2 – Preferred Mode for Mobile Banking Transactions

Preferred Mode	Frequency	Percentage
Banks Website	264	48.0
Banks App	286	52.0
Total	550	100.0

Source: Primary Data

The results of mobile banking customers depicts that 52% of them prefer to perform mobile banking with banks app while the 48% of them prefer banks website. This study highlights that majority of the customers prefer to do transaction in mobile banking through banks apps.

4.1 (b) Preference to choose Mobile Banking over Net Banking:

Consumers' preference to use Mobile Banking over Net Banking was analyzed. The following frequency table represents the preference of the respondents to perform banking activities.

Table 4.3 – Preference to choose Net Banking and Mobile Banking

Preference	Frequency	Percentage
Net Banking	218	39.64
Mobile Banking	332	60.36
Total	550	100.0

Source: Primary Data

The results revealed that 39.64% of them prefer to use Net Banking, whereas 60.36% of them prefer to use Mobile Banking for performing their banking transactions. The result of this study emphasizes that more than half of the consumers prefer to use mobile banking over net banking.

4.1 (c) Years of using Mobile Banking by the Respondents:

Consumers experience in using mobile banking was analyzed. Hence, years for accessing mobile banking by the respondents for the study ranges from 0-2 years, 2-4 years, 4-6 years, more than 6 years. The following frequency table represents the years of accessing mobile banking by the respondents.

Table 4.4 – Years of using Mobile Banking Services by the Respondents

Years of Accessing	Frequency	Percentage
Less than 2 years	234	42.5
2-4 years	158	28.7
4-6 years	96	17.5
more than 6 years	62	11.3
Total	550	100.0

Source: Primary Data

The result revealed that 42.5% of the respondents are accessing mobile banking for less than 2 years, 28.7% of them are using mobile banking for 2-4 years, 17.5% are using mobile banking for 4-6 years, and 11.3% of them are accessing mobile banking for more than 6 years. Therefore, this study accentuates that majority of the respondents are using mobile banking system for less than 2 years, which is similar to the previous studies (Suh & Han, 2002), (Ooi & Tan, 2016). This elucidates that only after demonetization majority of the people in India have started adopting the mobile banking system.

4.2 Factor Analysis:

The exploratory factor analysis was executed by using Principal Component Matrix Method and Varimax Rotation, to identify the factors influencing the consumers to adopt mobile banking services. 25 variables were taken up for the analysis out of which 3 variables were eliminated since the factor loading was very low and the rest 22 variables were reduced to 5 factors. The result of rotated component matrix is being given below:

Table 4.5 – Table representing variables with factor loadings and its naming.

Factor Naming	Variables	Factor Loadings
Factor – 1 Transaction Speed	Mobile Banking transfers are completed quickly when compared to traditional methods.	0.773
	Mobile Banking saves travel time and energy as we need not to stand in queue in banks or to pay utility bills.	0.733
	Within few minutes even the high value transfers can be made in Mobile Banking.	0.702
	Mobile Banking saves time as it is available 24x7	0.681
	Mobile Banking improves the speed of transaction.	0.565
Factor – 2 Compatibility	I enjoy using Mobile Banking as it suits me.	0.813
	I think that using Mobile Banking fits my lifestyle.	0.785
	I believe that using Mobile Banking enhances my image.	0.780
	I consider that using Mobile Banking is hassle-free.	0.776
	I think mobile banking is compatible with the way I like to shop.	0.625
Factor – 3 Connectivity	The services should be easily accessible and portable.	0.729
	I expect the services to be available whenever I need it.	0.704
	The internet network should be adequate to ensure success of Mobile Banking.	0.644
	I expect that Mobile Banking connection is available anywhere and anytime.	0.573
Factor – 4 Security	Security matters have significant influence on using Mobile Banking.	0.813
	I am concerned about my security while using Mobile Banking.	0.739
	Higher confidence in your network service provider is essential for safe transaction.	0.649
	Mobile Banking transaction requires technical experience for performing secured transfers.	0.643
Factor – 5 Convenience and Benefits	Users can easily do their various payments anywhere and anytime.	0.669
	It is a great compliment to cash.	0.606
	Mobile Banking saves time, energy and money.	0.558
	Discounts, rewards cash-back offers received on Mobile Banking are appreciable.	0.414

Source: Computed Data

Factor-1 “Transaction Speed” –Consumers find that mobile payments are advantageous due to its transaction speed and ubiquitous (Nath & Chen, 2008).Nowadays consumers are highly sensitive as they want to have a speedy delivery of service (Bateson, 1985). Time saving was considered to be highly

significant factor for the adoption of electronic banking facility as the transactions are completed in a jiffy while compared to conventional payment methods (Ledingham, 1984). Therefore, these points culminated to profoundly state that Transaction Speed can be considered as one of the important factors of Mobile Banking.

Factor–2“Compatibility” –The consumers’ perception towards adoption mobile banking is possible only if the technology is compatibility with the lifestyle. Compatibility feature is significant for smartphones and mobile banking usage, as people consider that technology should be compatible with their lifestyle. Therefore, these points culminated to profoundly state that Compatibility can be considered as one of the important factors of Mobile Banking.

Factor–3 “Connectivity” –Connectivity refers to the speedy access, usability, appearance of interface and navigation facility (Kim et al., 2004; Vance et al., 2008). Lack of proper connectivity will hinder the consumers to adopt mobile banking (Upadhyay & Jahanyan, 2016). Therefore, these points culminated to profoundly state that Connectivity can be considered as one of the important factors of Mobile Banking.

Factor–4“Security” –It is found that security hinders the usage of electronic payment system (Sathye, 1999). The various studies have been conducted to evaluate the effect of security matters on the adoption of electronic payment systems, since security is closely associated with decision to use electronic payment system. (Abrazhevich, 2004). Therefore, these points culminated to profoundly state that Security can be considered as one of the important factors of Mobile Banking.

Factor–5“Convenience and Benefits” –Accessibility(anytime, anywhere) is found to be more important variable of convenience. On the other hand Benefit (saving of cost, time and energy) was found to the significant factor that drives the consumers to acceptance and usage of electronic payment system.(Chou, et al. 2004)Therefore, these points culminated to profoundly state that Convenience and Benefits can be considered as one of the important factors of Mobile Banking.

4.3 One-Way ANOVA:

One-Way Analysis Of Variance was performed to determine the influence of demographic profile and socio-economic profile of the respondents on the various factors influencing the adoption of mobile banking services.

H₀: There is nosignificant difference among the demographic profile of the respondents with the factors influencing the consumers’ perception towards mobile banking services.

Table 4.6 – Table showing independent variables influence on dependent factors.

Factors	Gender		Age		Marital Status		Educational Qualification		Occupation		Annual Income		Years of using mobile banking	
	F	Sig	F	Sig	F	Sig	F	Sig	F	Sig	F	Sig	F	Sig
Transaction Speed	1.707	0.192	3.382	0.010	4.386	0.037	0.457	0.767	0.910	0.507	9.797	0.000	9.778	0.000

Convenience and Benefits	Security	Connectivity	Compatibility
0.126	2.063	0.111	12.370
0.723	0.151	0.739	0.000
1.343	2.311	2.629	2.434
0.253	0.057	0.034	0.046
0.472	7.249	0.797	0.682
0.492	0.007	0.372	0.409
1.329	3.582	0.500	1.243
0.258	0.007	0.736	0.291
0.252	1.371	1.020	0.747
0.980	0.207	0.419	0.650
4.701	1.408	3.274	4.874
0.003	0.240	0.021	0.002
10.140	4.454	10.523	7.144
0.000	0.004	0.000	0.000

Source: Computed Data

From the computed data of the sample unit it clearly signifies that there exists a significant difference among the respondents (demographic profile) with their perception towards various factors affecting the adoption of mobile banking services. There is a significant difference among the respondents – age (41-50 years), marital status (married), annual income (above 5 lakhs) and years of using mobile banking (more than 6 years) and their perception towards Transaction Speed factor. There is a significant difference among the respondents – gender (male), age (31-40 years), annual income (above 5 lakhs) and years of using mobile banking (more than 6 years) and their perception towards Compatibility Factor. There is a significant difference among the respondents – age (51 years and above), annual income (above 5 lakhs) and years of using mobile banking (more than 6 years) and their perception towards Connectivity Factor. There is a significant difference among the respondents – marital status (married), education (professionals), years of using mobile banking (more than 6 years) and their perception towards Security Factor. There is a significant difference among the respondents – annual income (above 5 lakhs) and years of using mobile banking (more than 6 years) and their perception towards Convenience and Benefits Factor.

5.1 IMPLICATIONS

The primary implication is that the security and privacy issues are to be resolved and also to inculcate the degree of trust among the consumers. The trust should be created in the minds of the consumers - that using mobile banking services are safe, secured and reliable. The banks should assure that personal information and financial data of the customers will be kept confidentially and transactions will be completed securely. The banks have to develop and update their websites and applications in such a

way that it is easy for the users to navigate. The network connectivity should be enriched and must be ubiquitous, which helps to improve the transaction speed and seamless completion of transaction. Government must encourage the users of mobile banking services by providing discounts, rewards, cash-back offers, etc. The government should impose strict rules and regulation and take stern actions on the hackers. All these will generate confidence among the people, which will consequently aid in boosting up of the adoption rate of mobile banking services.

5.2 CONCLUSION

This study was executed to identify the factors influencing the consumers' perception towards the adoption of mobile banking services. The results revealed that Transaction Speed, Compatibility, Connectivity, Security, Convenience and Benefits are significant among the respondents with their perception to adopt mobile banking. Mobile banking enables the consumers to accomplish their financial transactions instantly and it helps in enhancing the effectiveness of banking and financial activities. Consumers find that mobile banking is very useful for them and they also concur that using mobile banking is simple and it is easy to manage accounts with mobile banking facility. Most of the banks have their mobile apps and people are handling majority of their transactions via Smartphone. The safe, secured and speedy delivery of service, without any interruption will help to enhance the adoption rate of mobile banking services among the people. Hence, it can be concluded that mobile banking will be the epitome of banking.

5.3 LIMITATIONS OF THE STUDY

Convenient Sampling was used in the study, respondents were mostly from urban area and the rural area respondents' views are lacking in this study. Only the users of mobile banking were taken up for the study. The non-users views are unknown. The study is restricted to the respondents of Chennai City. Hence, the results arrived from the study may not be applicable to other geographical locations.

REFERENCES

- * Abrazhevich, D. (2004). Electronic payment systems: a user-centered perspective and interaction design, Ph.D thesis, Technical University of Eindhoven.
- * Anand Natarajan. (2016). Technologies for banking industry: Leveraging Digital India.
- * Bateson., J.E. (1985). Self-service consumer: An exploratory study. *Journal of Retailing*, 61(3), 49-76.
- * Chou, C., Condron, L., and Belland, J.C. (2005). A review of the research on Internet addiction, *Educational Psychology Review*, 17, 363-388..
- * Kim, M., Park, M., and Jeong, D. (2004). The effects of consumer satisfaction and switching barrier on customer loyalty in Koren mobile telecommunication services, *Telecommunication Policy*, 28, 145-159
- * Laforet, S., & Li, X. (2005). Consumers' attitudes towards online and mobile banking in China. *International Journal of Bank Marketing*, 23(5), 362–380.
- * Ledingham, J.A. (1984). Are consumers ready for the information age? *Jouenalof Advertising Research*, 24(4), 31-37.
- * Nath, R., & Chen, L. (2008). Determinants of Mobile Payments : An Empirical Analysis Determinants of Mobile Payments : An Empirical Analysis. *Journal of International Technology and Information Management*, 17(1), 9–20.
- * Ooi, K. B., & Tan, G. W. H. (2016). Mobile technology acceptance model: An investigation using mobile users to explore smartphone credit card. *Expert Systems with Applications*, 59, 33–46.
- * Shin, S., Lee, W., & Odom, D. O. (2014). A Comparative Study Of Smartphone User's Perception

And Preference Towards Mobile Payment Methods In The U.S. And Korea. *Journal of Applied Business Research*, 30(5), 1365–1377.

- * Upadhyay, P., & Jahanyan, S. (2016). Article information : *International Journal of Logistics Management*.
- * Vance, A., Elie-Dit-Cosaque, C., and Straub, D.W. (2008). Examining Trust in information technology artifacts: The effects of system Quality and Culture, *Journal of Management Information System*, 24(4), 73-100.
