

DOES COMPUTER LITERACY HELP MOBILE BANKING?

Nissi M K, Research scholar, Department of Economics, University of Madras and

Dr. S. Chinnammai, Professor and Head, Department of Economics, University of Madras

Abstract

Technological evolution is having significant importance in human in both general and professional life. Sudden boom in mobile technologies and increase in usage of mobile phone and similar devices have made mobile banking increasingly important in mobile commerce and financial services. When the globe stuck in the pandemic caused by COVID-19, an urge has been created towards online shopping and digital payments. This study is an attempt to explain about the growth of mobile banking in India. It also focuses on the increasing trend of mobile banking payments amidst Online payment mode. A sample survey has been done to know the adoption of mobile banking among the residents of southern part of Chennai and how the computer literacy helps it.

Keyword

Online banking, Digital payment, cashless Economy, Computer usage level, Digital India

Introduction

This era can soulfully dedicate as technology revolution and various technological innovations. The rapid expansion of information technology has imbibed into the lives of millions of people. This technology advancements have brought major changes in the worldwide economic and business atmosphere. Innovation of digital banking made the lives of people more easier and convenient to do transaction anywhere and at any time.

India is one of the fastest developing country. Even the informal sectors are being brought into formal sector slowly and steadily where demonetization, introducing GST, digital India program played a vital role. India is now focusing more towards digital economy and have a target of creating over \$1 trillion of economic value from the digital economy in 2025.¹ Even though pandemic due to covid-19 pulled the GDP down, the digital economy continued to establish its root even deeper in India. A study by FIS Global finds from their survey that 68 percent of Indian consumers is now using online or mobile banking to conduct financial transactions, 48 percent of respondents expect to use contactless payments instead of cash or

¹ Varun Aggarwal and Venkatesh Ganesh, 'Digital economy a \$1-trillion opportunity for India, Info-tech, Business Line, The Hindu, 20 Feb 2019

card in post COVID-19 world and 49 percent of Indian consumers faced salary cuts due to the COVID-19 pandemic.²

Mobile Banking technology has the capability to improve the quality of common people's life and also it brings efficiency in banking sector. Many banks have implemented Internet and mobile banking to offer their customers a variety of online services with more convenience for accessing information and making transactions. Customer satisfaction and customer retention are increasingly developing into key success factors in e-banking.

Theoretical Background

There are various school of thought to define money in which the board approach of Money is by **Central Bank approach**³ (by Radcliffe Committee of United States) where this approach states that money is not only the currency but also the realizable assets i.e., the asset that can be converted into money at will. As per this theory all the digital currency and funds can be treated as money. Like the digital wallet, plastic currency, cheques and all the digital payments including coupons, finance with Non-Banking Financial Institutions (NBFI). As they stated, the money is now changing its form from physical cash to digital currency.

Earlier studies

Sakshi and Rupali Sandhu (2021) found convenience, efficiency, privacy, and website design are the major integral determinants of internet banking service quality. They suggested that the internet banking should be of free-of-charges thus it can be a huge opportunity for more customers to pool. To improve confidence and enhance self-efficiency in the use of Internet banking services, video shows, and demos may be performed at bank branches to have inclusive growth in Digital Banking.⁴

Sindhu Singh and Srivastava (2018) identified various factors influencing the adoption of mobile banking in India. The results found that security, computer self-efficacy, perceived ease of use, and perceived financial cost, in that order of influence, affect customers' intention to adopt mobile banking.⁵

Qureshi et al., (2008) concluded their study online banking provide favoured aspects that serves as main perusing factors to accept as it is usefulness, provide various banking

² Consumer usage of digital Banking and Contactless Payments Surges in India During Pandemic, finds New FIS survey, Cision PR newswire, Mumbai, 10 Sep 2020, 13:32 IST

³ <https://www.economicdiscussion.net/money/money-functions-approaches-and-types/4061>

⁴ Sakshi and Rupali Sandhu, Internet Banking Adoption Among Common Mass, Journal of International Academic Research for Multidisciplinary, Vol 9, Issue 1, Feb 2021

⁵ Singh, S. and Srivastava, R.K. (2018), "Predicting the intention to use mobile banking in India", International Journal of Bank Marketing, Vol. 36 No. 2, pp. 357-378.

information and provides security as well as privacy in online banking system in Pakistan. At the same time lot of customers think that it is not easy to use online banking system.⁶

Tiwari et al (2007) stated that the increasing in mobile financial services customer mobility trend can be expected to gain even higher momentum. It can be expected that mobile channel can be an indispensable part of the multi-channel strategies in the banking sector, following the footsteps of Online Banking.⁷

Objective and Hypothesis of the study

Technology is affecting the life of every individual in this present age. Mobile banking is also one of the technologies which are getting recognition around the globe. There are a lot of customers in developing country like India, who are accepting this technology. Thus, the objective of the study is “To analyse the growth trend in mobile banking”

Various factor directly or indirectly contributes toward mobile banking. One such factor is the computer literacy. To valuate this hypothesis has been set as

H₀: There is no significant relationship between computer usage level of respondents and usage of mobile banking

Methodology

The study has been focused to analyze the trend growth in Mobile banking with respect to computer knowledge. Primary study has been conducted to collect data. Convenience random sampling (also known as grab sampling, accidental sampling, or opportunity sampling) method has been used to collect a sample of 164 individuals from the southern part of Chennai, Tamil Nadu where this part is considered as technologically sound and has high literacy compared to other parts of City namely north and central Chennai. These data were collected by questionnaire during the month of November 2020. To understand the data and to analyze the hypothesis, Chi square test has been used.

Online banking in India

Since July 2015, the introduction of Digital India Program is showing an upward sloping curve in Cashless transactions. The major push towards online payment accelerated during COVID-19 Pandemic. Mobile banking outstripped card transactions as 163% to \$286 billion in 2019. Point-of-sale transactions completed using various cards grew 24% to \$204 billion.⁸

⁶ Tahir Masood Qureshi, Muhammad Khaqan Zafar and Muhammad Bashir Khan, Customer Acceptance of Online Banking in Developing Economies, Journal of Internet Banking and Commerce, Vol 13, No 1, April 2008

⁷ Rajinish Tiwari, Stephan Buse and Cornelius Herstatt, Mobile Services in Banking Sector: The role of Innovative Business Solutions in Generating Competitive Advantage, Technische Universität Hamburg-Harburg, Working paper No 48, Feb 2007

⁸ Samath Sharma, 2020 India Mobile Payments Market Report, S&P Global Market Intelligence

While a contraction in economic activity amid lockdowns due to the coronavirus outbreak will adversely impact cashless payments, mobile payments should be relatively buoyant. Their uptake happened with one of the concerns as cash and plastic cards can interact with potentially virus infected surfaces. Almost all the mobile payments services in India are overlaid on Unified Payments Interface (UPI)⁹, which helps the users to connect their banking activities with their mobile phone. India is one of the top countries now in terms of High digital transaction in the past couple of years. Even though the per capita transaction as a whole declined. Consumer apps provided by Google and Walmart-owned PhonePe have spread firmly across India in terms of UPI payments. There are various competitors for online banking service providers like Google, Amazon and even the Facebook and WhatsApp has entered the race.

Table 1: Online Banking trends in India

Year	ECS DR	ECS CR	IMPS	NACH	CC	DD	PPIs
2013-14	1,268	2,492	96	215	1,540	955	81
2014-15	1,740	2,019	582	1,221	1,899	1,213	212
2015-16	1,652	1,059	1,622	3,802	2,407	1,589	488
2016-17	39	144	4,116	7,916	3,284	3,299	838
2017-18	10	115	8,925	10,736	4,590	4,601	1,416
2018-19	12.6	132.35	15,903	14,762	6,033	5,935	2,129

Source: Compiled from various reports, RBI, govt. of India

Within the digital payments, retail electronic payments comprising credit transfers {NEFT, fast payments (IMPS and UPI)} and direct debits (ECS, NACH) have shown a rapid growth at a CAGR of 65 percent and 42 Percent in terms of volume and value, respectively. Stored value cash issued in the form of wallets and prepaid cards demonstrated an increased adoption with a CAGR of 96 percent and 78 percent in terms of volume and value, respectively.¹⁰

Mobile banking vs digital payments

⁹ Unified Payments Interface (UPI) is a system that powers multiple bank accounts into a single mobile application (of any participating bank), merging several banking features, seamless fund routing & merchant payments into one hood.

¹⁰ Assessment of the progress of digitization from cash to electronic, Publications, Reserve Bank of India, 24 Feb 2020

NOTE

NEFT - National Electronic Funds Transfer

IMPS - Immediate Payment Service

ECS - Electronic Clearing System

NACH - National Automated Clearing House

CARG - Compound annual growth rate

Mobile banking is a subset of electronic banking which underlies not only the determinants of the banking business but also the special conditions of mobile commerce. Mobile Banking has been gaining increasing popularity amongst various sections of the society for past few years. This has been evident by the table 2 which shows the percentage share of mobile banking is increasing over the years among total digital payments.

Table 2: Percentage growth in mobile banking

Year	Mobile Banking	Total Digital Payment	Percentage
2017-18	976.85	1,45,902	0.67
2018-19	1872.26	2,34,339	0.80
2019-20	6200.32	3,43,455	1.81

Source: Annual Report, Reserve Bank of India, Govt of India (2020)

Primary study: Results and Discussion

Sample survey has been done and results were collected from 164 respondents. The nature of the respondents are 46.3 percent are male and 53.7 percent are female and 72 percent of the respondents are in the age of 18-30 and all the 164 respondents are literate and have done minimum schooling that is till 10th standard. To understand the relationship between computer usage level and usage of mobile banking, hypothesis has been framed and tested with chi-square.

H₀: There is no significant relationship between computer knowledge of respondents and usage of mobile banking

H₁: There is significant relationship between computer knowledge of respondents and usage of mobile banking

Table 3: Details of computer usage level of respondents and usage of mobile banking

Particulars	Using Mobile Banking	
	Yes	No
Beginner	3	15
Average computer knowledge	89	21
Advance computer knowledge	23	3
No computer knowledge	2	8

Source: primary data

Table 4: Chi-Square Test Result

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	47.863 ^a	3	.000
Likelihood Ratio	44.410	3	.000
Linear-by-Linear Association	35.280	1	.000
N of Valid Cases	164		

a. 1 cells (12.5%) have expected count less than 5. The minimum expected count is 2.87.

Sources: Collected and computed by Researcher from collected data.

The result shows that Pearson chi square value is 47.86 with 3 degrees of freedom. The p-value is <0.000, which is less than the conventional level of significance. And the cells have expected counts less than 5 which is important because of the assumption that if more than 20 percent of the cells have expected counts less than 5 the model is unfit but however thankfully we have 12.5 percent of the cells have expected counts less than 5 which means that the assumptions hasn't been violated. As the chi-square assumption has not been violated, therefore the p-value is less than our chosen significance level $\alpha = 0.05$, the null hypothesis is rejected at 1% level of significance.

Hence, it can be concluded that there is significant relationship between computer knowledge of respondents and usage of mobile banking.

Conclusion

There is an increasing trend in mobile banking usage by Indians mainly after COVID-19 pandemic and to have an efficient usage of mobile banking and to have a wholistic growth in the economy basic computer literacy is necessary. The result from the primary study is from an urban part of the country. Then rural part of the country and its inclusiveness in digital economy is under question. Moreover, demo and training should be given in the relative bank branches to include the entire Indian population.

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