

A study on Digital Transformation in Banking Payments

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Abstract

An active and adequate funding system is the driving engine of the growth and evolution of an economy. Over the years, the money dealing sector has marked out a slew of advances. Digitalization remains one such advancement that has shifted the paradigm of the entire banking system. This transformation in banking has brought a wealth of new opportunities for users and has greatly eased the life of customers. E-banking has emerged as a game-changer in the fast-growing business world. Any technical knowledge person can perform most of his banking requirements over the internet. This paper mainly focuses on a study with regards to banking services provided on digital platforms, customer experience with digital banking, the latest Trends in Digital Banking, and Popular Digital Payment Technologies in digital banking.

Keywords: Digitalization, Digital platform, E-payment, and Demonetization

Introduction

Digitalization enables businesses to make better decisions through better use of data and more efficient workflows. It is a radical change of an existing process through the expanded or huge use of technology. As an industry that has to deal with massive customer bases, a wide range of data points, and continuous developments, both regulatory and otherwise, banking has become one of the most attractive fields wherein the capabilities of modern computing technology are amply demonstrated. As a highly competitive sector, banks have to cope with constantly increasing customer expectations to both maintain as well as increase their customer base.

A healthy banking sector functions as a cornerstone for the growth and development of a healthy and robust economy. Banks benefits to regulate cash transaction from those who have a fund. Blocks in this flow of funds can handicap the growth trajectory of any nation. Keeping this in mind, there is a need for the banking sector to advance along with broader

global trends in the field and be at the very cutting edge when it comes to embracing innovation. The push towards a digitally empowered economy will enable the benefits of banking to reach the masses and percolate to every part of society. Recognizing this fact, banks have adopted digitalization voluntarily. Coupled with the massive encouragement from the authorities, the use case for technologies such as card-based payments, net banking, electronic fund transfers, etc. has greatly increased. The introduction of zero-balance accounts coupled with debit cards has encouraged the adoption of banking even amongst the remote and rural population. This has been exemplified by the fact that

43.7 crore bank accounts have been opened in the last seven years, resulting in deposits of Rs. 1.46 lakh crores.

More recently, there have been significant efforts to make a beeline for a non-cash economy. While going entirely cashless remains a dream in the pipeline, significant strides have been made on this front. Customers and merchants alike are encouraged to route transactions through their banks for increased convenience. While doing away with the myriad of hassles that accompany carrying large amounts of cash, a cashless economy is also generally one that is more compliant.

Objectives of the Paper

1. To evaluate the influence of digitalization on banking.
2. To figure out the elements influencing the scope of digital banking.
3. To examine the latest trends in banking.
4. To identify the data on the adoption of banking

Research Methodology

The method of study is primarily descriptive. The data was collected using a mixture of primary and secondary data. Primary data has been collected through a questionnaire distributed to the target population through messaging platforms such as WhatsApp. The general public included 172 respondents comprising 44.2% of women and 55.8% of men. The majority of the respondents were from the 21-40 age group to reflect the broader trend of first-time adopters of new banking technologies. Respondents from other stages of life were also constituted in the sample are also regarded. Secondary data refers to data collected indirectly through existing research articles, journals, prior studies, and other reliable sources. Secondary data was accessed from research articles, books, journals, and authenticated websites for this study.

Factors Affecting Scope of Digital Banking in India

Access to Education: In many places of the country, access to knowledge is still yet to be entirely noticed. As such, limited access to education remains one of the greatest hurdles in the spread of digital banking. The use of digital banking requires a degree of comfort with both banking as well as the use of computers and mobile devices. Conversely, it's also noticed that many uneducated people have also taken part in the digital revolution in the country. This is primarily due to the efforts of the government to make mobile networks available in every corner of the country and at affordable tariffs.

Access to Technology: In the past, access to mobile technology and data was a luxury reserved for the upper classes. With some of the most affordable data costs in the world, India has seen widespread penetration of mobile devices in the last few years. As digital banking is highly reliant on strong network infrastructure, trends indicate that the adoption of digital transactions will only increase. The cost of mobile devices has also been reduced due to the presence of multiple multinational competitors and the vast untapped opportunity that the affordable device segment represents.

Resistance to Change: Within the banking industry itself, a lot of employees are resistant to change and the implementation of new technologies. This often stems from a lack of training and even a stigma associating technology with the loss of jobs.

Security: It is a known fact that entering into transactions online is fraught with its associated risks. These include loss of money, identity theft, loss of sensitive information, etc. In addition, a lot of unfounded fears are prevalent due to common deception. It is also important to note that most databases rely on state-of-the-art technologies. As such, hacks on payment networks and banks remain a rarity.

Government Impetus: To bring in a more compliant economy, by supporting the adoption of digital banking in the country through its push for a cash-free economy. The demonetization drive in 2016, perhaps signaled the single biggest tipping factor in the adoption of digital payments platforms for most people.

Latest Trends in Digital Banking

- **Rapid Influx of Customers:** The introduction of newer and more accessible technologies (E.g., E-wallets, UPI) coupled with the government's encouragement for the adoption of these has meant that more and more people have been shifting to digital transactions. Over the last few years, a dramatic increase has been noticed in the adoption of digital banking means such as credit/debit cards, E-wallets, UPI, etc.
- **Merging of Physical and Digital Processes:** Many banks in India now enable their customers to conduct the same banking functions both at physical branch locations as well as over a network. Bank accounts can now, even be opened through an ATM, loans, and deposits can be availed through mobile apps, etc. This makes it very convenient for customers to access banking services both over the counter as well as from the comfort of their homes.
- **Improved Web Interface:** Several banks have been improving their websites and apps

for customers. The use of AI-enabled chatbots is one such instance wherein the bank can offer instantaneous replies to customer queries 24X& as well as cut down on customer service costs.

- **Mobile Technology:** The widespread use of mobile devices and cheap network costs in the country have made it essential for banks to develop robust mobile interfaces. Banks nowadays have mobile apps whereby account holders can perform their essential banking activities.
- **Move towards paperless banking:** Banks are now moving towards a complete digitalization of most banking functions in line with global industry standards. Many banks have commenced the move towards end-to-end digitalization of banking processes. This remains a highly technical issue with multiple hassles in itself.

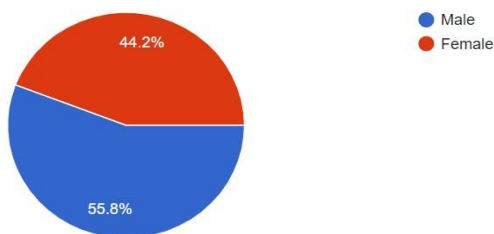
Data Analysis and Interpretation

The sample size selected for this study is 172 respondents who are in and around Udupi. An attempt has been made to identify the factors that influence customers while adopting digitalization, the degree of comfort with relation to digital payment systems, and factors influencing their decision in picking between substitute methods of payment.

Demographics (gender, income, etc.)

Out of the total answerer, 44.2% of them are females while the balance of 55.8% are males.

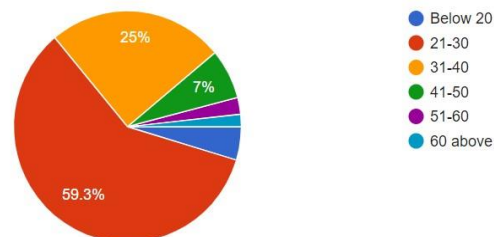
Figure1. Digital payment adoption between the genders



As per Figure 2. 59.3% of the respondents were 21-30, comprising mainly students and adults who have recently begun their careers. This was followed by 25% of the population who were over 30 years old but below the age of 40. A mere 7% of the population was over 40 but below 50. The age groups below 20

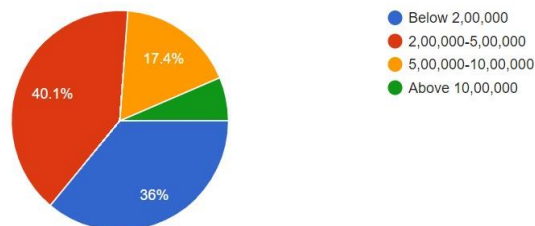
and those above 50 and 60 represented less than 5% of the total sample each.

Figure 2. Respondents as per age group



The larger part of the replier surveyed earned below Rs. 5,00,000 per annum (76.1%), reflecting the broader trends in the earning population of the region. Also, fresh adopters of new technologies tend to be the young population who have newly started earning as reflected in the income trends. 17.4% of the population earned over Rs. 5,00,000 but less than Rs. 10,00,000 per annum. Those earning over Rs. 10,00,000 per annum were only 6.50% of the population.

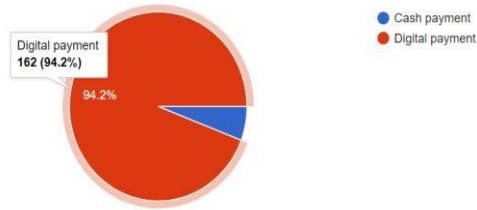
Figure 3. Respondents as per earnings



Preferences with regards to digital and cash payment

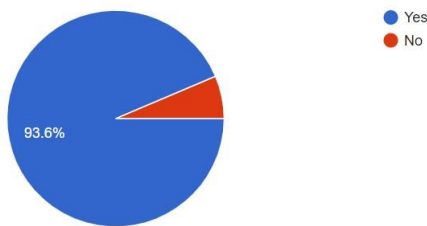
Out of the total respondents, 162 (94.2%) said that they preferred using some form of digital payments over cash payments. This reflects the penetration level of digital payment technologies over the last few years amongst the common population.

Figure 4. Preference of respondents for digital and cash payment



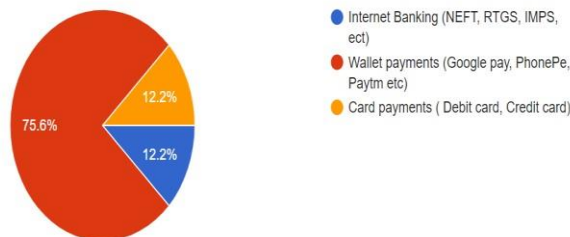
93.6% of the total respondents felt that the demonetization exercise of the Government in 2016 was the major catalyst for the growth in usage of digital payment technologies. This is in line with the existing understanding about it being the primary incident that triggered the change in usage trends.

Figure 5. Reason for the rise in usage of digital payment



Wallet payments and UPI are the most popular digital payment technologies amongst the respondents. This is most likely due to the ubiquitous nature of the acceptance of payments via these modes. It was observed that amongst respondents aged 50 and over, card-based payments remain quite popular. 12.2% of the population preferred them as a payment mode over the wallet and UPI-based transactions. 12.2% also preferred net banking as a means of making payments.

Figure 6. Popularity in digital payments

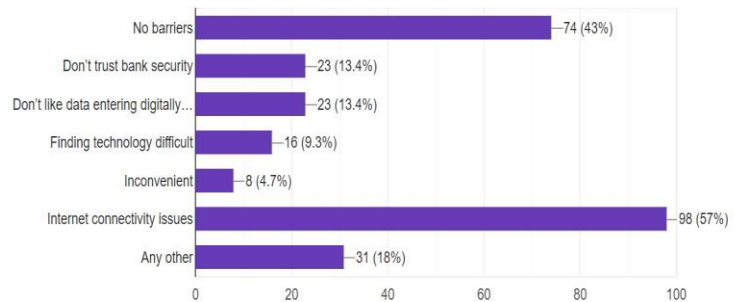


Issues faced in the adoption

When asked about the barriers to entry with regards to digital payment technologies, a large proportion of respondents felt internet access is a major barrier to

technologies. This could be especially an issue amongst the rural population where cellular networks are weaker than in urban areas. Lack of trust in digital banking and difficulties in the adoption of technology remains an issue as well.

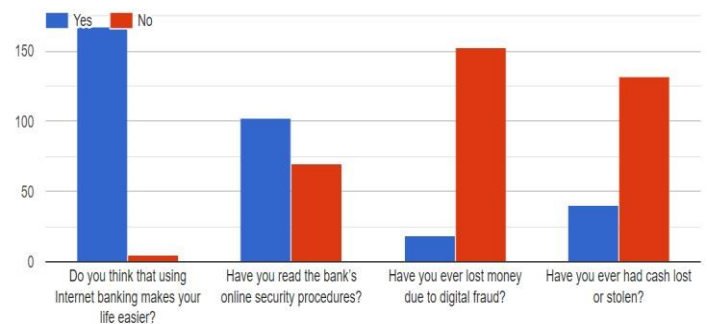
Figure 7. Barriers to adoption of Digital payment



It was also noticed that most respondents are unaware or have not read the security procedures adopted for the digital payments technologies they use. This is an area of concern.

Over 150 respondents, however, have not lost money in cases of online fraud which underlines the effectiveness of security systems in place when it comes to online payments. This number is more than the number of people who have lost cash through theft. This is an indicator of the convenience and safety brought in by digital payment systems.

Figure 8. Different views on the use of digitalization



From the above data, we can conclude that digital payment technologies have become highly popular amongst the young population. This is primarily due to the convenience it offers as well as the relative safety offered.

As barriers such as internet connectivity and technology literacy are done away with, the rates of adoption are only bound to increase. There is a major push towards cashless transactions, which most respondents believe was first felt during the demonetization drive of 2016.

Greater literacy is required regarding safety and best practices when it comes to making digital payments to ensure the continued success of this mode of payment.

Popular Digital Payment Technologies

- **Electronic Funds Transfer:** These are modes of remittance of money that facilitate the immediate transfer of funds amongst participants in transactions over the internet. Most banks added multiple modes of transfer of funds over electronic media. Some commonly used forms of EFT are:
 - **Real-Time Gross Settlement (RTGS):** Commonly used in India for high-value transactions exceeding Rs. 2 Lakhs, RTGS enables the real-time transfer of funds amongst participants. It must be noted that RTGS cannot be performed on bank holidays.
 - **National Electronic Funds Transfer (NEFT):** NEFT is a nationwide payments platform that enables the transfer of funds on a one-to-one basis. Users can transmit funds from any bank account to another account in any branch of a bank participating in this scheme. Recently, NEFT was made available on a 24x7 basis.
 - **Immediate Payment Service (IMPS):** A recently introduced technology; IMPS enables the instantaneous interbank transfer of funds using a mobile device. It must be noted that IMPS is also available on bank holidays.
- **Credit Cards:** Most banks also have a separate credit card division. Credit cards are a form of lending wherein users can borrow funds up to a specified limit. The dues against these cards are settled by the bank periodically. Credit cards also enable

the customer to withdraw cash at ATMs. In India, most credit cards are linked to global networks such as VISA, MasterCard, or American Express (AMEX). Sunday, an Indian Government-owned network also plans to support credit cards shortly. Currently, the network only supports debit cards.

- **Debit Cards:** Debit cards facilitate payments at authorized outlets using point-of-sale (POS) machines and also withdrawal of cash at ATMs. Debit cards are related to networks such as VISA, Maestro, RuPay, etc.
- **Unstructured Supplementary Service Data (USSD):** It requires users to enter a code (usually *99#) to access a few functions. Accessible even through a feature phone, the user can check account balance, send money, change MPIN, etc.
- **E-wallets:** These are virtual wallets that function like a debit card in which currency can be stored and can be used to make in-store payments. Example- Paytm, FreeCharge, Mobikwik, etc.
- **Aadhar Enabled Payment Service (AEPS):** A futuristic venture by the government, AEPS is a proposed system wherein the customer can make payments to merchants using their Aadhar number.
- **POS Machines:** Various developments have taken place in the Point-of-Sale (POS) machine itself. Besides being used for debit/credit card transactions, POS machines now even support NFC and other web-based applications.

Conclusion

Through the above study, one can gauge that the banking sector as a whole is in the process of a major upheaval. The industry is in the process of a massive digital transformation where multiple modes of digital payments are becoming immensely popular due to the increased convenience that they offer. As more people enter the target demographic targeted by these technologies, the rate of adoption is only set to increase.

The development of infrastructure and education about the technologies are the major areas that need focus in the push towards a cashless society. The

government and the banking industry have much to do about safety and awareness regarding safe and best practices when it comes to these technologies. In what can only be an encouraging sign, the adoption of smartphones and the growth of mobile internet access indicate that steady progress has been made in this regard.

A cashless economy is one where individuals tend to be more compliant, especially when it comes to tax-related and accountability matters, which explains the massive impetus provided in this direction by the authorities. On the whole, the digital banking and payments field remains one where massive strides have been made and yet significant developments are awaited. The legal and regulatory issues regarding cryptocurrencies as legal tender and the banking sphere as a whole remain areas where constant changes are being made as new developments take place.

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