

A Study on Growth of Digital Payment in India

HARSHA C MATHAD

*Assistant Professor, JNN College of Engineering, Shivamogga, Karnataka.
E-mail: harshacm@jnnce.ac.in*

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Abstract: The traditional banking system is becoming obsolete, and the change in technology and the revolution in telecommunication have created the modern banking system. Any time and anywhere is the mantra of the modern banking system, and digital payment is the only solution for the present revolution of the digital economy. In the Indian banking sector, payments are made in five modes: credit transfers (RTGS), credit transfers (retail), debit transfers and direct debits, card payments, prepaid payment instruments, and paper-based instruments. The current study is focused on the growth of digital payments in the Indian banking sector.

Keywords: Digital payment, Credit Transfers – RTGS, Credit Transfers – Retail, Debit Transfers and Direct Debits, Card Payments, Prepaid Payment Instruments, Paper-based Instruments

Introduction on Indian banking system and digital banking system

The banking sector is an important sector for the development of the economy. The rules governed by the RBI have led to the development of banks in India. After a big change in the Indian banking sector by mergers of banks at present, we have 12 public sector banks, 22 private banks, and 46 foreign banks. (IBEF, 2023) The scope of fintech and the 2016 demonetization have changed the traditional banking system to a digital banking system. Cashless payments are the only solution for modern business setups. At present, in India, from small businesses to large business units, everyone is using digital payments. Small local kirana stores, roadside vegetable sellers, padalists, auto drivers, street vendors, food stalls, small retail shops, online sellers, freelancers, and all big businesses are using digital payments in India. (V. Sanjai, 2021) To understand the development of the banks, it is necessary for us to understand the revolutions that took place in the industries from 1.0 to 4.0.

The first industrial revolution took place in the 18th century, where focus was given to the steam engine, the water wheel, the spinning wheel, etc. The

second industrial revolution took place from 1871 to 1914, and the major focus of this era was mass production, rail roads, the utilization of electricity, and the telegraph network. Adoption of new software's and computerization took place in the third industrial revolutions. From 2011 the fourth industrial revolution took place and which brought many changes in the all kind of work. This era is full of IoT, Artificial intelligence automation, Blockchain, and Machine Learning. The industrial revolution 4.0 has created loots of changes in the Indian banking industry also.(Ritika Gupta, 2023).

Artificial intelligence and machine learning are the two important factors that are changing the scenario in every industry. Today artificial intelligence is used extensively in the banking industry for customer services, fraud detection, to understand the credit worthiness of the customer, in the risk management, in regulatory compliance, for prediction of security market, and for understanding the customer behaviour. Artificial intelligence and machine learning has created a good move for digital banking in banking sector by adopting the user- friendly applications and software's for the end users from data analytics. (Geetha, 2021)

Review of Literature

The study conducted by Dr. Rajeshwari M. Shettar in the research study "Digital Banking: An Indian Perspective" witnessed that the increasing education level of Indian citizens, convenience of anytime and anywhere banking concepts, usage of smart phones, easy payment of utilities, and working hours of digital banking have increased the digital banking system in India.(Shettar, n.d.)

The problem statement of the study done by Dr. C. Nithya clearly says that to bring the competitiveness of banks in international landscape it is very important to adopt the digital banking system in the Indian banking system. During the research study it was identified that digital banking services are provided in the following areas like bill payment, fund transfer, investment, shopping, checking account balances, mobile banking, rewards and loyalty points, unified payment interface, and message alert. It was also identified that there are many challenges and advantages are available from the electronic banking. (Nithya, n.d.)

The study conducted to understand the usage of internet banking in the rural sector by Anirban Sarkar and Dr. Ahana Sen concludes that microbusiness' enterprises are still hesitant to adopt digital banking for doing business transactions. The reason is a lack of trust, and it may be knowledge of usage.

According to the research study, processing time, ease of use, network connectivity, cyber security, and compatibility are the reasons for using digital banking services in the real sector for micro and small entrepreneurs. (Sarkar & Sen, n.d.)

“A study on the use of digital banking services by consumers in Bangalore rural district” is done by R. Umesh, N. Divya, and C.P. Prakash. The research study is carried out with the objectives of ascertaining the awareness level of customers about digital banking and factors affecting banking services. The study concluded that most rural people are aware of digital banking, but they are afraid to use it because of some problems like security risks, privacy threats, and technical issues.(Umesh, 2022)

Most of the research is carried out to learn about digital banking in India. The current study is done to know about the growth of digital payments in the Indian banking system and to identify which payment mode has seen the most growth in the last 29 months.

Statement of the Problem

The effective and efficient banking system is the key driver of the development of all economies. The financial system of the country depends on the transparency of the payments and receipts of financial transactions. As a part of the global economy, it is very important to adopt changes in the technology and processes of the banking system. We have witnessed many bankruptcies in history and recently. Hence, a transparent digital payment system from the bank will always secure and develop the economy.

Objectives of the Study

The objectives of the current study are as follows:

- To assess and identify the growth of digital payments in the Indian banking sector from May 2021 to September 2023.
- To assess and identify the growth of payment methods (in digital payments) from May 2021 to September 2023.

Scope of the study

The current study focuses on digital payment transactions made through Indian banks. The time frame for the study is May 2021–September 2023. Digital payment transactions include only domestic transactions, and they exclude transactions using Fast-tags, failed transactions, chargebacks, reversals, and

expired cards or wallets. The current study focus is only on identifying the growth of digital payments in the study period.

Need of the Study

The digital payments growth assessment will benefit governments, banks, fintech companies, and end users like customers. From a government point of view, identifying the growth of digital payments will help in making effective policies. For the Banks and fintech companies, they can focus on simplifying processes and securing transactions, and they can also focus on fixing the charges on digital payment transactions. From the bank customer point of view, it shows the transparency of the bank towards digital payments and the growth of the bank.

Research Methodology

The current research study of “A study on usage of digital payment in India” is carried by using the secondary data from the Reserve bank of India. The data is collected for the May 2021 to September 2023. Covid 19 is one of the boosters for the digital banking in the world hence data was collected from May 2021.

Data Analysis and Findings of the Research Study

Table 1: Trend growth of the digital payment in the India from 2021 May to 2023 Oct

<i>Year</i>	<i>Month</i>	<i>Total Payments (In Crore)</i>	<i>Total Digital Payments (In Crore)</i>	<i>Proportion of Digital Payment (In %)</i>	<i>Trend % Base Point May 2021</i>
2021	May	1,16,04,231	1,12,62,437	97	100
2021	June	1,39,24,026	1,34,46,596	97	119
2021	July	1,47,52,668	1,41,99,411	96	126
2021	August	1,42,26,488	1,36,92,586	96	122
2021	September	1,53,89,818	1,48,23,351	96	132
2021	October	1,47,55,136	1,41,72,532	96	126
2021	November	1,53,37,107	1,48,03,884	97	131
2021	December	1,79,62,798	1,73,21,843	96	154
2022	January	1,50,76,275	1,45,18,553	96	129
2022	February	1,50,04,815	1,43,89,494	96	128
2022	March	2,05,13,379	1,98,19,044	97	176
2022	April	1,61,09,991	1,54,39,731	96	137
2022	May	1,62,59,827	1,56,65,265	96	139

<i>Year</i>	<i>Month</i>	<i>Total Payments (In Crore)</i>	<i>Total Digital Payments (In Crore)</i>	<i>Proportion of Digital Payment (In %)</i>	<i>Trend % Base Point May 2021</i>
2022	June	1,75,48,225	1,69,49,029	97	150
2022	July	1,67,04,666	1,61,24,940	97	143
2022	August	1,68,04,896	1,62,56,512	97	144
2022	September	1,93,16,027	1,87,24,921	97	166
2022	October	1,69,87,188	1,64,36,254	97	146
2022	November	1,77,04,137	1,71,23,017	97	152
2022	December	1,96,09,997	1,89,88,610	97	169
2023	January	1,81,76,745	1,76,06,106	97	156
2023	February	1,75,63,818	1,70,09,704	97	151
2023	March	2,30,71,084	2,23,69,974	97	199
2023	April	1,76,80,633	1,70,41,352	96	151
2023	May	1,90,50,136	1,84,22,364	97	164
2023	June	2,04,07,083	1,98,28,777	97	176
2023	July	1,93,15,032	1,87,27,722	97	166
2023	August	2,00,69,666	1,94,76,343	97	173
2023	September	2,08,12,075	2,02,37,054	97	180

Sources: Reserve bank of India,

The above table and data analysis reveal that the growth of digital payments stood at 180% during the research study. The paper payment mode stood at 3% during the study period. March is witnessing the highest digital payments when compared to other months since it is the end of the financial year and all the transactions should be completed for that financial year. The average digital payment stood at Rs 1,67,19,911 crore, and the total payment stood at Rs 1,73,01,309 crore during the study period.

Table 2: Different payment mode average amount for the study period and its growth

<i>Payment Modes</i>	<i>Average Amount (In crores)</i>	<i>Average Growth (In %)</i>
Credit Transfers - RTGS	1,20,79,610	144
Credit Transfers - Retail	43,42,636	160
Debit Transfers and Direct Debits	1,04,438	148
Card Payments	1,68,962	176
Prepaid Payment Instruments	24,264	113
Paper-based Instruments	5,81,399	170

Sources: Reserve bank of India,

The above table and data analysis identify that the average amount of payment for RTGS (Real Time Gross Settlement) mode is high (Rs 1,20,79,610 crore) compared to any other mode of transaction. The RTGS payment mode includes customer transactions and interbank transactions. In terms of average growth during the study period, card payments (176%) stood out of all the payment modes. In card payment mode, it includes a credit card and a debit card. The growth of credit card (average of Rs 1,10,067 crore) digital payments is almost double that of debit cards (average of Rs 58,896 crore), and it shows that credit card holders are becoming more prevalent in India.

Credit Transfers - RTGS payment mode consists of 72% of digital payments in India which stood in rank one for the payment mode. The credit transfer retail is stood at second rank which consists of 26% of digital payments. In this mode of payment NEFT (National Electronic Funds Transfer), UPI (Unified Payments Interface), IMPS (Immediate Payment Service), NACH (National Automated Clearing House) Cr, APBS (Aadhaar Payments Bridge System) , AePS (Aadhaar Enabled Payment System) , etc are included.

The average payment of NEFT during the 29 months of research study stood at Rs 27,08,131 crore, and it is the 16% total digital payment. UPI follows the next position under credit transfers retail, which consists of 6% of total digital payments. In terms of amount, it is Rs 10,65,741 crore. The IMPS is also a very important mode of payment in India; during the research study, the average payment was Rs 4,32,418 crore, which is the third rank for credit transfer retail.

The debit transfers and direct debits mode is the third mode of digital payment. The average payment of debit transfers and direct debits includes BHIM (Bharat Interface for Money) Aadhaar Pay, NACH (National Automated Clearing House) Dr, and NETC (National Electronic Toll Collection). The average amount of digital payment in this mode is Rs 1,04,438 crore, which is 1% of total digital payment in India. Under this mode of payment, NACH Dr. has the highest payments.

The fourth method of payment mode is card payments, which include credit cards and debit cards, and it is further divided into POS (point of sale)-based and others. This payment method accounts for less than one percent of the total digital payments. The average card mode of digital payment was Rs 1,68,962 crore during the study period, and its average growth was 176%.

The wallet and cards are the two instruments of the prepaid payment instrument mode of digital payment. This mode of payment accounts for less

than one percent of the total digital payment mode. The average digital payment of the prepaid payment was Rs 24,264 crore during the study period.

Conclusion of the Study

As we know, change is the only permanent thing in this world, and it is applicable to all works. To compete internationally, adopting the changes in the Indian banking sector is mandatory, and as part of that, lots of changes took place in the Indian banking sector in the last decade. As per the objectives of the study, the assessment of the digital payment growth says that it grew to 180% during the study period. The different payment modes are used for digital payments. It includes credit transfers (RTGS), credit transfers (retail), debit transfers and direct debits, card payments, prepaid payment instruments, and paper-based instruments. The study concludes that, at present, in India, digital payments are done very extensively.

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