

Digital Payments Diffusion in Emerging and Developed Economies



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Abstract: Digital India initiative aimed at improving the lives of the common men in India through technology. Efforts have been made to make technology in India as accessible, affordable and value addition. Digital initiatives have been undertaken in India in almost all sectors. Payments and settlements are not exceptions to the digital push of India. Indian Digital Payments have registered unprecedented growth in terms of volume of transactions (CAGR of 58.9%) and also in terms of value (CAGR of 28.4%). But, in the global payments market, the Indian digital payments market didn't perform well in many measures of digital payments growth including a number of digital transactions per capita per year and India has not featured in any top ten places. So, this research work focuses on identifying and analyzing the growth of the Indian digital payments market and its state in the global digital payments market. The research work is based on secondary data and the secondary data have been collected from central banks, reports, and Bank for International Settlement. The purpose of this research work is descriptive in nature and it has employed analytical research type. The study found through its scientific research approach that Digital payments market in India has grown steadily since 2014 and it still lacks behind many countries of the world in terms of measures of digital payments growth which are Cash in Circulation to Gross Domestic Product ratio, Number of transactions per inhabitant and so on.

Keywords: Digital payments, global digital market, India, settlements

I. INTRODUCTION

All over the world, technology has changed the lives of people and business organizations of all kinds. The way in which the business was carried out is completely different today. To complete one business transaction, more time, labor, material and money were required two decades ago. But, the arrival of Information and Communication Technology (ICT) had led to the paradigm shift in the work culture of individuals and business organizations. ICT development coupled with the internet and mobile technology brought a revolution in carrying out business transactions and they paved way for the better performance of organizations and enhanced service quality. India is also a part of this growth story via technological development.

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Financial services are one of the sectors which are turned around by ICT and digital technologies like the internet, websites, smartphones, and so on. In fact, the concept of money has been getting transformed always by technology intervention right from the barter system to paper currency to electronic money which is now a prominent transaction method.

Electronic money is expedited by "Digital Transactions". "Digital Transaction is a payment transaction in a seamless system effected without the need for cash at least in one of the two legs, if not in both. This includes transactions made through digital / electronic modes wherein both the originator and the beneficiary use a digital / electronic medium to send or receive money" (RBI, 2019)

Digital transactions reduce transaction time, save human energy, and reduce wastage of resources. Thus, Digital transactions boost the economic growth of individuals, organizations and the country at a large. Realizing the importance of digitalization of the economy, India has been taking a number of initiatives especially since 2015. The initiatives include introduction and execution of "Digital India" campaign, Immediate Payment Services (IMPS), Unified Payment Interface (UPI), Aadhaar Enabled Payment Services (AEPS), Bharat Interface for Money (BHIM) application, National Automated Clearing House (NACH), Cheque Truncation System (CTS) and waiving of transactions fee for National Electronic Funds Transfer (NEFT) and Real-Time Gross Settlement (RTGS) by RBI from 1st July 2019 onwards. As a result, the Indian payment system gradually changes from a cash-based economy to a cashless economy. The growth of digital transactions in the Indian economy is a remarkable one after 2015. Individuals and business organizations in India are increasingly embracing digital transactions leading to payments and receipts day by day. India has entered the global league of the countries which try to become a cashless economy. The government of India announced a tax of 2% to be deducted at its source when there are more than Rs 1 crore withdrawals from the bank in a year in its Union Budget for the year 2019-2020. This move is aimed at curbing cash payments particularly in the business organizations and to promote digital transactions. The digital transaction is often referred to as digital payment in the field of finance. Digital payment is a method of digital transactions in which the payment is made through digital modes. In digital payments, customer and receiver both use digital modes to pay and accept money. Digital payment is also called electronic payment.

II. REVIEW OF LITERATURES

The first event associated with digital payment occurred in the United States (US) in the year 1918 when the currency was moved with the aid of the telegraph.



But, technology was not used for the stated transaction. However, The Federal Reserve Bank of the United States created an “Automated Clearing House” in the year 1972 using technology which is an alternative for cheque payments (M.A.Kabir, 2015).

Electronic payment is an exchange of money that happens online between the merchant and the purchaser (Whinston, 1997). Online payment is a payment made by the use of electronic signals connected to debit or credit accounts (Sheelings, 1999). Electronic payment is also defined by Agimo as payment by means of electronic exchange of details of credit cards, direct credit or some other electronic means other than paying with money and cheque (Australian government information management office, 2004).

Online payment is any sort of non-money payment that does not include a paper cheque (Hord, 2017). India had enacted “The Payment and Settlement Act” in the year 2007 which has defined Digital Payments. “electronic funds transfer means any transfer of funds which is initiated by a person by way of instruction, authorization or order to a bank to debit or credit an account maintained with that bank through electronic means and includes point of sale transfers; automated teller machine transactions, direct deposits or withdrawal of funds, transfers initiated by telephone, internet and, card payment” (Payment and Settlement Act, 2017). There are quite a number of online payment services that have been developed within the payment system around the globe. These include electronic cheques, e-cash, credit cards, and electronic fund transfers.

Several types of online payment systems have been studied by Koponen who classified them into electronic currency and account-based systems. In account-based systems, users are allowed to pay using their own bank accounts while the latter allows consumers to pay only with the help of some electronic currency. Both the systems provide numerous payment methods such as i) Electronic payment cards (credit/debit and charge cards), ii) Mobile payments, iii) E-wallets, iv) Smart and loyalty cards, v) Virtual credit cards, vi) Stored value card payment, and vii) E-cash.

The digital payment system has challenges in terms of infrastructure, socio-cultural, and regulations.

III. RESEARCH PROBLEM

India shifts to digital payment at a rapid pace with the ultimate objective of having a cashless economy. This move has been fueled by ever-increasing smartphone penetration, internet penetration, lower cost of the transaction, and other factors which include the support of government, regulators and banking system. The volume of digital payments have increased over the period 2011-12 to 2015-16 and posted a compound average annual growth rate (CAGR) of over 58.9 percent. The rate of growth has reached to 104.4% percent in 2017-18 (NITI Aayog, 2018). However, achieving the state of the digital economy or cashless economy is not a simple task. There are many challenges which pose the threat for the objective of having the cashless economy in India. These challenges comprise low internet speed, lack of awareness, lack of adoption to the change by people, and security concerns. According to the Networked Readiness Index (NRI) 2016, which assesses a nation’s growth in the digital paradigm, India placed 91st rank out of 136 countries (World Economic Forum, 2016) and According to the

Information Technology and Communication Development Index, 2017, India occupied 134th position out of 171 countries (International Telecommunication Union, 2017). These indices reflect India’s poor performance in digital and ICT development which is due to low penetration of basic digital infrastructure and skill deficit. On one hand, the Indian digital payments sector grows rapidly and on the other hand, India has been at the lower rank as per international indices. Further, India is not in any position among the top 10 cashless economies in the world. Therefore, this study focuses on ascertaining the state of digital payments in India as compared to the global payments market and the study tries to evaluate growth trends, opportunities, and challenges of Indian digital payments.

IV. OBJECTIVES OF THE STUDY

Research objectives of this research work are;

1. To identify and analyze the position of India’s digital payment market in the global payments market
2. To measure and analyze the growth trend of the Indian digital payments market
3. To compare the growth of digital payments in India with other selected countries

V. RESEARCH METHODOLOGY

The research design used for this study is a descriptive study and the type of study is analytical in nature. Secondary data is used for the research work. The secondary data has been collected from Reserve Bank of India, Ministry of Finance, NITI Aayog, National Payments Corporation of India (NPCI), Capgemini World Payments Report and Bank for International Settlement (BIS).

VI. RESULT ANALYSIS

The growth of Indian digital payments is an exciting story. India steadily marches towards a cashless economy from a cash-based economy. This transition phase is fuelled by favorable regulatory policies, internet penetration, and increased use of smartphones. Digital payments have picked up with the growth of e-commerce companies and e-wallet companies and after demonetization efforts of the Government of India (GOI).

Digital payments have grown significantly in all kinds of businesses right from roadside shop vendor to hyper malls. Further, digital payments happen largely in e-ticketing of road, rail, airlines, movies and hotels, online shopping and payment of utility bills. The growth of Indian digital payments is promoted by the introduction of new payment interfaces and the adoption of the digital infrastructure in India. The growth trends of Indian digital payments are presented in this part of the study.

In India, there are two digital payment segments namely Systematically Important Financial Market Infrastructures (SIFMIs) and Retail Payments. SIFMIs consist of Real-Time Gross Settlement (RTGS), Collateralized Borrowing and Lending Obligation (CBLO), Government Securities clearing and Forex clearing.

Retail payments include a cheque or paper clearing (Cheque Truncation System (CTS), Magnetic Ink Character Recognition (MICR) cheques, and Non-MICR cheque clearing), retail electronic clearing (Electronic Clearing System (ECS) debit, ECS credit, NEFT, IMPS, NACH) and card payments (Credit cards, Debit cards, and Prepaid Payment Instruments).

SIFMIs contribute 11% of digital payments in India whereas 89% is contributed by retail digital payments in terms of the value of digital payments during the year 2017 – 18. Further, SIFMIs contribute only 1% of digital payments and retail payments account for 99% of digital payments in terms of volume during the year 2017 – 18. 52% of the total volume of retail payments was card payments, 41% was electronic clearing and 7% was paper clearing during the year 2017-18. The following table -1 demonstrates the value and volume of digital payments in India in the year 2013-14. The financial year 2013-14 has been taken as a starting point for analysis and discussion of the growth of digital payments in India because this is financial year after which digital payments programs were initiated in India rigorously.

Table – I: Volume of Digital Payments in India from 31st March 2014 to 31st March 2019 (in Million)

Particulars	31 st March 2014	31 st March 2015	31 st March 2016	31 st March 2017	31 st March 2018	31 st March 2019
RTGS	81.11	92.78	98.34	107.86	124.46	136.63
CBLO	0.18	0.21	0.22	0.22	0.20	0.13
Government Security clearing	0.87	1.09	1.02	1.51	1.12	1.11
Forex clearing	1.51	1.73	1.89	1.93	2.17	2.38
Total SIFMIs	83.67	95.81	101.4	111.5	127.9	140.2
Paper clearing	1,253.97	1,196.51	1,101.91	1,206.69	1,170.68	1,123.76
Retail electronic clearing	1,018.79	1,687.44	3,141.60	4,161.78	5,467.29	7,113.25
Debit and credit cards	7,219.13	8,423.57	10,036.73	12,054.47	13,358.62	16,046.26
Prepaid Payment Instruments	144.26	314.46	747.96	1,963.66	3,459.05	4,604.34
Total Retail digital payments	9,636.15	11,621.98	15,028.20	19,386.60	23,455.64	28,887.61
Grand Total	9,719.82	11,717.79	15,129.67	19,498.12	23,583.59	290,278.6

Source: RBI Bulletin

Table I reveals the volume of digital transactions carried out in India from the year 2013-14 to the year 2018-19. The table clearly provides a number of transactions under SIFMIs and also under Retail digital payments. From the

table I, the following digital payments growth trends can be observed in terms of the volume of digital transactions;

- Both the components of digital payments namely SIFMIs and retail digital payments grew over a period of time in India.
- SIFMIs has grown 67.62% since the year 2013-14.
- Retail digital payments have grown 199.78% over the chosen period of time.
- The overall growth of digital payments in India has been 198.64%.
- It should be mentioned here that there was a big leap in retail digital payments since the year 2016 which may be attributed to the digital push given by the Government of India through demonetization and digital transactions.
- The paper clearing component is the only retail digital payment component that has fetched negative growth for the chosen period of the time. There has been a reduction of 10.38 Million paper clearing over the period of 2013-14 to 2018-19. In fact, there has been a reduction of 10.38% growth in paper clearing component.
- The retail electronic clearing component has grown a whopping 598.2% since the year 2013-14.
- Debit and credit cards are also grown significantly. The card transactions have achieved 122.2% growth as of 31st March 2019 as compared to 31st March 2014.
- Prepaid payment instruments component has exponentially grown (3092%) in the given period.
- RTGS has grown 68.45% since the year 2013-14
- Forex clearing also shows a positive trend of the growth
- CBLO and Government security clearing components show a mixed trend of growth over the period of the time.

Table – II: Value of Digital Payments in India from 31st March 2014 to 31st March 2019 (in Billion Rupees)

Particulars	31 st March 2014	31 st March 2015	31 st March 2016	31 st March 2017	31 st March 2018	31 st March 2019
RTGS	904,968.04	929,332.89	1,035,517.7	1,253,652.0	1,467,431.9	1,715,520.6
CBLO	175,261.92	167,645.96	178,335.28	229,528.33	283,307.58	181,404.63
Government Security clearing	161,848.24	258,916.76	269,778.20	404,389.08	370,363.78	509,315.87
Forex clearing	263,604.59	325,437.69	359,256.94	422,255.95	421,130.66	474,789.88
Total SIFMIs	1,505,682.79	1,681,333.30	1,842,922.21	2,309,825.44	2,542,234.01	2,881,030.99

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Paper clearing	93,003.03	85,434.14	82,206.76	80,958.15	81,893.29	82,460.65
Retail electronic clearing	47,415.95	65,365.51	91,407.92	131,917.39	192,014.14	258,745.44
Debit and credit cards	22,143.51	25,414.69	29,323.57	30,208.92	38,214.64	45,121.45
Prepaid Payment Instruments	79.05	213.42	490.1	838.0	1416.3	2128.76
Total Retail digital payments	162,641.54	176,427.76	203,428.39	2,43,922.47	313,538.41	388,456.30
Grand Total	1,668,324.3	1,857,761.0	2,046,350.6	2,309,825.4	2,855,772.4	3,269,487.2

Source: RBI Bulletin

Table II exposes the value of digital transactions that happened in India from the year 2013-14 to the year 2018-19. From table II, the following digital payments growth trends can be observed in terms of the value of digital transactions;

- a. Both the components of digital payments grew over a period of time in India.
- b. SIFMIs have grown 91.34% since the year 2013-14.
- c. Retail digital payments have grown 139% since the year 2013-14.
- d. The overall growth of digital payments in India has been 95.97%.
- e. The paper clearing component displays a negative trend in the value of the retail digital payment. There has been a reduction of 10542 Billion worth of paper clearing over the period of 2013-14 to 2018-19. In fact, it is a reduction of 11.33% growth in paper clearing component.
- f. The retail electronic clearing component has grown a colossal 445.2% since the year 2013-14.
- g. Debit and credit cards have reached 103.7% growth as of 31st March 2019 as compared to 31st March 2014.
- h. Prepaid payment instruments component has attained 2593% growth in the given period.
- i. RTGS has grown 89.56% since the year 2013-14
- j. Forex clearing has grown at 80.11%
- k. CBLO and Government security clearing components show a mixed trend of growth over the period of the time.

Table – III: Penetration of Cards, Automated Teller Machines, Points of Sale (POS), Mobile Banking, and Prepaid Payment Instruments in India as on 31st March 2014 and 31st March 2019

Particulars	Volume (In Million) 31 st March 2014	Volume (In Million) 31 st March 2019	Value (In Billion) 31 st March 2014	Value (In Billion) 31 st March 2019
Credit and Debit Cards	7,219.13	16,046.26	22,143.51	45,121.45
Credit Cards	512.03	1,772.36	1,556.62	6,078.81
Usage of Credit cards at ATMs	2.96	9.77	16.77	45.33
Usage of Credit cards at POS	509.08	1,762.59	1,539.85	6,033.48
Debit Cards	6,707.10	14,273.90	20,586.89	39,042.64
Usage of debit cards at ATMs	6,088.02	9,859.61	19,632.72	33,107.89
Usage of debit cards at POS	619.08	4,414.28	954.17	5,934.75
Prepaid Payment Instruments (PPIs)	144.26	4,604.34	79.05	2,128.76
m-Wallet	106.09	4,139.28	27.45	1,836.55
PPI Cards	37.65	465	27.88	291.34
Paper Vouchers	0.53	0.05	23.71	0.87
Mobile Banking	94.71	6,194.80	224.18	29,577.05
Cards Outstanding	413.63	971.72	–	–
Credit Card	19.21	47.09	–	–
Debit Card	394.42	924.63	–	–
Number of ATMs (in actuals)	160055	221703	–	–
Number of POS (in actuals)	1065984	3722229	–	–

Source: RBI Bulletin

Table III indicates the growth of various elements of retail digital payments which are commonly used by individuals in India. The elements of retail digital payments include credit cards, debit cards, POS, ATMs, PPIs, m-Wallet, and mobile banking. Further, the table reveals numbers of debit cards and credit cards which are circulation in India and numbers of ATMs and POS installed in India. The factual information of table III are;

- a) The card transactions have achieved 122.2% growth in terms of volume and cards have reached 103.7% growth in value during the period of 2013-14 to 2018-19.
- b) Credit cards have grown 246.14% and 290% in numbers of transactions and in value respectively
- c) Debit cards show growth of 112.8% and 89.6% in numbers of transactions and in value respectively
- d) Prepaid payment instruments component has attained a 2593% growth in value in the given period.

- e) M-Wallets have grown 2101.31 Billion in value whereas they have grown 4033.2 Million numbers of transactions since 2013-14.
- f) There have been 47.09 Million credit cards in circulation as of 31st March 2019 whereas there were 19.21 Million credit cards on 31st March 2014.
- g) There have been 924.63 Million debit cards in circulation as of 31st March 2019 whereas there were 394.42 Million debit cards on 31st March 2014.
- h) The numbers of ATMs are increased by 38.51% (An increase of 61648 ATMs) as on 31st March 2019.
- i) An increase of 26,56,245 POS in the payments market from 2013-14 to 2018-19 which ticks 249.18% growth in a period of 5 years.

Further, this study measures the growth of digital payments using the following indicators;

- a) A number of digital transactions per capita per annum which indicates the number of digital transactions per person in a year.
- b) Value of digital transactions (VDT) to Gross Domestic Product (GDP) ratio – VDT to GDP Ratio
- c) Cash in Circulation (CIC) to GDP ratio – CIC to GDP Ratio
- d) The average value of retail digital payment per transaction

Table – IV: Number of digital transactions per capita per annum, VDT to GDP Ratio, and CIC to GDP Ratio in India since March 2014

Particulars	31st March 2014	31st March 2015	31st March 2016	31st March 2017	31st March 2018	31st March 2019
Number of digital transactions per capita per annum	2.38	4.06	5.44	10.73	13.15	22.42
VDT to GDP Ratio	542%	561%	579%	644%	726%	769%
CIC to GDP Ratio	11.4%	12%	12%	9%	11%	10.7%
Average value of retail digital payment per transaction (Rs)	16,878	15,180	13,446	12,510	13,295	13,447

Source: Compiled by the author

Table IV displays prominent measures of digital payments. Table IV provides the following insights in respect of digital payments in India.

- a. A number of digital per capita per annum is an indicator of the growth of digital payments in terms of volume and it is calculated through dividing total volumes of digital payments transactions in a year in a country by population of the country in a particular year. The table shows that the indicator has jumped from a mere 2.38 in the year 2013-14 to 22.42 in the year 2018-19. It is a huge increase

(842%) in a shorter period of time. This indicator clearly exhibits that every person in India had done 2.38 digital transactions during the year 2013-14 on an average and the same number of digital transactions has increased to 22.42 per person during the year 2018-19. In fact, this growth is mainly attributed to digital economy initiatives of GOI.

- b. The second indicator of this study “Value of Digital Transactions (VDT) to GDP ratio” is an indicator growth of digital payments in terms of value. It is computed through dividing the total value of digital payments in a year in a country by GDP of the particular year of the same country. This indicator also shows the positive results of the growth of digital payments in India. VDT to GDP ratio has traveled upward from 542% in the year 2013-14 to 769% in the year 2018-19. It shows the size and potential of the Indian digital payments market which is available to be tapped by the market players.
- c. Cash in Circulation (CIC) to GDP ratio measures the growth of the digital payment market in a given economy indirectly. More the CIC to GDP ratio, the lesser the digital payment market and vice versa. Indian CIC to GDP ratio has decreased to 10.7% in the year 2018-19 as compared to the previous years. It should be observed that CIC to GDP ratio was only 9% in the year 2016-17 because of the demonetization effort of GOI.
- d. The average value per retail digital transaction is a measure of the proportionate and simultaneous growth of the retail digital payments market in a country in a year. The average value per retail digital transaction is computed by dividing the total value of retail digital transactions in a year in a country by volume of retail digital transactions in a year in the country. From the above table, it can be noted that the average value per retail digital transaction in the year 2013-14 was Rs 16,878 and the indicator has been Rs 13,447 in the year 2018-19. The average value per retail digital transaction for the chosen period of time indicates that the Indian retail digital payments market grows both in volume and values.

VII. STATE OF DIGITAL PAYMENTS IN EMERGING AND DEVELOPED ECONOMICS: A CROSS COUNTRY ANALYSIS

The global digital payments market has been growing steadily over a period of years. Global payments revenue reached \$1.9 trillion in the year 2017 as per McKinsey and Company Global Payment Report, 2018. The global payments market has grown 11% in the year 2017 on an average (McKinsey & Company, 2018).

According to NITI Aayog Report on Digital Payments, Indian Digital Payments market has grown at 44.6% during 2017-18 when compared to the year 2016-17 which is a remarkable growth despite having many constraints like lack of awareness about digital payments, non-availability of extensive internet connectivity, and lower acceptance of technology in rural India (NITI Aayog, 2018).

But, it should be mentioned here that although according to NITI Aayog report,



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the Indian digital payments market grows registering a compound average annual growth rate (CAGR) of over 58.9 percent in terms of volume and a CAGR of 28.4 percent in terms of value, India didn't find a place in top ten digital payments market in terms of volume as per the report of Capgemini on Trends in Payments 2018 (Capgemini and BNP Paribas, 2018).

At the global level, the top ten digital payments market in terms of the volume include the United States of America (USA), Euro Zone, China, Brazil, the United Kingdom, South Korea, Russia, Japan, Canada, and Australia. Further, it is depicted in the report of Capgemini, Sweden is the number one country in the world in terms of growth in a number of non-cash transactions per inhabitant, followed by the USA on the basis of the year 2016 data. India's number of non-cash transactions per inhabitant stands at nowhere in that list.

The following table reveals the number of non-cash transactions per inhabitant in the selected countries on the basis of the year 2017 data.

Table V: Number of cashless transactions per inhabitant as of 2017

Country	2017
Singapore	782.4
Sweden	497.9
USA	473.6
Euro Area	186.8
Russia	178.5
Brazil	148.5
China	96.7
South Africa	79.2
Indonesia	34.0
India	10.7

Source: Report of the High-level Committee on Deepening of Digital payments, RBI

Table V clearly divulges that India's number of cashless transactions per inhabitant (Number of digital transactions per capita per annum) has to travel a long way to reach the stage of the digital economy. The lower score for the number of cashless transactions per inhabitant in India (10.7) is a distressing factor in the journey of achieving the digital economy in the country.

However, there are many positive aspects in the growth story of the digital payments market in India which are listed out below;

- As far as CIC to GDP ratio is concerned, India is placed in the middle position much ahead of Japan, Hong Kong and Singapore which have more Cash in Circulation in the economy as per Bank for International Settlement.
- The volume of payment transactions in India grew strongly and steadily at a CAGR of 40% between 2012 and 2017 showing an appetite for modes of payment other than cash. Payment systems volume grew at rates faster than India only in China, Indonesia, and Saudi Arabia.
- India has a sound and appropriate legal framework to promote digital payments in India. India has enacted the Payment and Settlement Systems Act in the year 2007.
- India has also established an institutional infrastructure to boost up digital payments market in India and to bring out innovative payment systems using ICT. National

Payments Corporation of India (NCPI) was established in the year 2008 to enhance digital payments in India.

- Reserve Bank of India insists that the Merchant Discount Rate (MDR) should be borne by the merchant and not passed on to the customer.
- GOI reimburses MDR charges on digital transaction values up to Rs 2000 using debit cards, BHIM UPI and Aadhar enabled payment systems till the end of 2019.
- GOI announced no transaction fee for RTGS and NEFT transactions since 1st July 2019h.
- GOI levied a 2% tax on cash withdrawals more than 1 crore in a year by a person to discourage the cash transactions.

VIII. DISCUSSIONS AND CONCLUSION

India has an aspiration of becoming a digital economy at the earlier possible time in order to accomplish transparency in the governance and inclusiveness in the economy. GOI has been taking a series of initiatives which include demonetization, no MDR charges on digital transactions, the establishment of NPCI, enactment of Payments and Settlements Act, 2007, Immediate Payment Services (IMPS), Unified Payment Interface (UPI), Aadhaar Enabled Payment Services (AEPS), Bharat Interface for Money (BHIM) application, National Automated Clearing House (NACH), Cheque Truncation System (CTS) and waiving of transactions fee for National Electronic Funds Transfer (NEFT) and Real-Time Gross Settlement (RTGS) to boost up digital payments in India with the ultimate objective of having the digital economy. Although GOI has been taking steps to improve digital payments since the year 2006 onwards, the efforts picked up from the year 2014.

As a result of tireless efforts of GOI and RBI, and the adoption of digital payments by the people, India has really fared well in the growth rate of the digital payments market.

- India grows robustly both in terms of SIFMIs and retail digital payments
- India grows at a CAGR of over 58.9 percent in terms of volume and at a CAGR of 28.4 percent in terms of the value of digital transactions as per 2017 data.
- India has a well laid down legal framework to promote digital payments in India
- India has a reasonable "average value of retail digital payment per transaction"
- VDT to GDP Ratio of India has been remarkable – 769%
- The card transactions have achieved 122.2% growth in terms of volume and 103.7% growth in value during the period of 2013-14 to 2018-19.
- Credit cards have grown 246.14% and 290% in numbers of transactions and in value respectively
- Debit cards show growth of 112.8% and 89.6% in numbers of transactions and in value respectively
- Prepaid payment instruments component has attained a 2593% growth in value in the given period.
- M-Wallets have grown 2101.31 Billion in value whereas they have grown 4033.2 Million numbers of transactions since 2013-14.



- k. Numbers of ATMs and POS have grown phenomenally over the period of the time
- l. At the global digital payments market level, India still has been in a budding stage which is proved by the below-mentioned statistics.
- m. The top ten digital payments market in terms of the volume include the United States of America (USA), Euro Zone, China, Brazil, the United Kingdom, South Korea, Russia, Japan, Canada, and Australia.
- n. Sweden is the number one country in the world in terms of growth in a number of non-cash transactions per inhabitant, followed by the USA.
- o. Singapore comes first in the number of cashless transactions per inhabitant in the global digital payments market.
- p. China is ranked second in the global digital payments market and it is ranked first in the Asian Digital Payments Market.

Keeping the growth story of India in digital payments market and statistics published by global agencies on global digital payments market, it can be concluded that India has started to perform well in the digital payment arena within a shorter period of time, but, it lacks much behind in many of the indicators like CIC to GDP, number of cashless transaction per inhabitant and so on. At the same time, GOI and RBI move forward in the right direction to promote digital payments market by waiving charges on MDR, RTGS, NEFT, IMPS and by levying a tax on more cash withdrawals from banks with the decisive objective of becoming “Digital Economy” and with the aspiration of emerging global leader in digital payments market.

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