



A STUDY ON DIGITAL PAYMENTS IN INDIA

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ABSTRACT:

The Information Technology (IT) has reformed the different parts of our lives; especially it has given a simple approach in the way of digital payments

During the Demonetisation time frame, the Government of India encouraged individuals to do all business exchanges by means of Digital mode. The everyday citizens began to move from traditional payment system towards Digital Payments frameworks which guaranteed protected, secure and convenience. With significant innovative leaps in the advanced mobile phone and easy web access, it has driven the Indian market to acknowledge Digital Payments.

Digital payment is a way of exchange which is made through digital modes. In digital payment, the payer and recipient both utilise computerised modes to send and receive money.

The Government of India has been undertaking a few measures to advance and support digital payments in the country. As a feature of the 'Digital India' campaign, the public authority has an intend to make a 'digitally engaged' economy that is 'Anonymous, Paperless, Cashless'. There are different methods and types of digital payments.

On November 22, 2010, NPCI initiated Immediate Payment Services (IMPS) to provide an Immediate, 24-hour×7, interbank electronic money transfer through cell phones. IMPS assists clients to use mobile phones as a channel for getting to access their bank accounts and put high interbank fund transfers in a secured manner with immediate confirmation features.

Introduction:On November 8, 2016, India went through demonetisation by banning high-value currency overnight-a move that gave an unexpected boost to a cashless Indian economy. It poked the cash dependent Indians to go digital in uncommon ways. Paytm for instance, saw a surge (700% increase), worth of cash added to Paytm accounts (1000%) reaching a record 5 million exchanges every day. Fired by the pandemic and the resulting lockdown, the general monetary printing volume has diminished by 13% and the cash flow has declined by 23.3%.

United Payment Interface (UPI): Being perhaps the biggest supporter of cashless exchanges, it is a favourite among Indians for its benefit, speed and access. With no fringe accounts, no limitations on minimum payment, and the benefit of a 24*7 continuous payments with zero assistance costs, the rate in expansion in UPI exchanges has been staggering. It reached an unsurpassed high 3.2 billion exchanges in July 2021 showing a 10-11% leap in both worth and volume month-on-month. Admittedly, it has turned into a catalyst for a sensational rise in a few private players in India with a few private players like Google Pay, Amazon Pay, Paytm, PhonePe and even WhatsApp Pay.

BANKING CARDS (DEBIT/CREDIT/CASH/TRAVEL/OTHER S):

Banking cards offer shoppers greater security, comfort, and control than some other method of payment. The wide variety of cards accessible - including credit, debit and prepaid - offers gigantic adaptability, also. These cards give 2 factor verification for secure payment, for example- secure PIN and OTP. RuPay, Visa, MasterCard are some of the examples of card payments.

UNIFIED PAYMENTS INTERFACE

(UPI):UPI is a digital payment method that terminates various bank accounts into a single application, permitting the exchange of funds effectively between any two parties. When contrasted with NEFT, RTGS, and IMPS, UPI is undeniably more obvious and normalised across banks. You can utilise

MOBILE WALLETS:

Mobile Wallets, as the name indicates, are a sort of wallet wherein you can carry cash but in a digital format. Often individuals link their bank accounts or banking cards to the wallet to the wallet to enable secure computerised exchanges. One more method for utilising wallets is to add cash to the Mobile Wallet and utilise the said balance to transfer funds.

POINT OF SALE:

A Point of Sale (PoS) is where sale take place. On a macro level, a PoS might be a shopping center, a market or a city. On a mini level, retailers believe a PoS to be the region where a client finishes an exchange, for example, a checkout counter. It is otherwise called a place to checkout.

PoS (Point of Sale) is known as the place where a transaction or sale occurs. For quite a while, PoS terminals were viewed as the checkout counters in shopping centres and stores where the transaction was made. The most well-known sort of PoS machine is for Debit and Credit cards, where clients can make payment by essentially swiping the card and entering the PIN.

With digitization and the rising popularity of other internet-based payment methods, new PoS techniques have come into the image.

Internet Banking:

Internet banking, otherwise called e-banking, online banking or virtual banking, is an electronic payment framework that allows clients of a bank or other financial organisation to lead a scope of monetary exchanges through the financial establishment's site. E-banking requires a consistent internet connectivity to receive or make transactions and access a bank's site, which is called Internet Banking.

NEFT: - National Electronic Funds Transfer (NEFT) is a cross country payment framework working with one-to-one money transfer. Under this Scheme, people, firms and corporates can electronically move assets from any bank branch to any individual, firm or corporate

having an account with some other bank in the nation taking part in the Scheme

RTGS: - RTGS is characterised as the uninterrupted (real time) settlement of money transfers separately on a request by-request basis (without mesh). 'Real time' signifies the handling of guidelines at the time they are gotten rather than at some later time; 'Gross Settlement' signifies the settlement of money transfer directions happens separately (on a guidance-by-guidance basis).

Electronic Clearing System (ECS): -ECS is an alternate technique for affecting payment exchanges in regard of the utility-bill payments, for example, phone bills, power bills, insurance premium, card payment and credit reimbursements, and so forth, which would deter the requirement for giving and taking care of paper instruments and subsequently work with further developed customer service by banks/organizations/enterprises/government offices, and so on, acquiring/getting the payments.

Immediate payment service (IMPS): -

IMPS provides immediate, 24X7, interbank electronic money transfer assistance through phones. IMPS is a powerful instrument to transfer funds right away inside banks throughout India through phones, internet and ATM which isn't just protected yet additionally economical both in monetary and non-monetary viewpoints.

Banks themselves urge clients to go digital as it makes processes more straightforward for them as well.

Cryptocurrency:

Cryptocurrency, frequently called Cryptocurrency or crypto, is any type of cash that exists digitally or virtually and uses cryptography to get exchanges. Crypto do not have a central giving or controlling power, rather utilising a decentralised framework to record exchanges and issue new units.

Cryptographic money is a computerised payment framework that doesn't depend on banks to check exchanges. It's a peer-to-peer framework that can allow anybody anyplace to send and get payments. Rather than being actual cash carried around and traded, cryptographic money payments exist simply as computerised sections to a web-based information base depicting specific transactions. At the point when you move crypto money, the exchanges

are recorded in a public record. Cryptographic money is reserved in digital wallets.

Benefits of using digital payments:

Immediate Payment:

Electronic payments are a lot quicker than the customary payment types like money or checks. On account of digital payments, you have no limitation of time or area. You can without much of a stretch make payments at whenever from anyplace across the globe.

Online payment systems have disposed of the requirement for going to the banks to make payments or transactions. Presently your clients don't need to burn through their time remaining in the long queues at banks. They can undoubtedly pay you by utilizing an electronic payment application.

Ease and convenience:

One of the main benefits of computerized payment is the consistent experience they give to clients. Decreased reliance on cash, quick exchange speed, and the simplicity of executing make online payments a favoured choice. Traditional payments such as money and checks are risky, steps, and actual presence. With online payment, you can send and get money from anyplace on the planet at the snap of a button.

Higher payment security:

In spite of its hearty elements, electronic payment frameworks has not become so famous among the merchants. They are as yet involving the standard, worn out techniques for accepting payments. Because of which, they are passing up a major opportunity the chance for serving more clients.

Online payment frameworks offer you various approaches to getting your payments like tokenization, encryption, SSL, and so on. Presently your clients don't need to enter their card information each time as they can save their card info or complete their exchanges by utilizing a One Time Password.

Better client comfort:

Online payments can assist you with giving helpful payments experience to your customers. It permits your client to buy merchandise using a credit card by providing them with the option to pay later. Rather than sending consistent updates for payments to your clients, you can naturally collect cash after a particular period.

Contactless:

In the hours of the COVID-19 pandemic, individuals have begun tracking down

approaches to keeping away from human touch to save themselves from getting impacted by the Covid. Because of this, the requirement for contactless payment has expanded.

You can involve contactless POS terminals in your business to stay away from the human touch. In this framework, the payee needs to hold his telephone close to the terminal and his payment will get consequently handled. Likewise, you can empower your clients to make payments by utilizing QR codes or OTP.

Economic advancement:

Clients execute more web-based when they see the simplicity, comfort, and security of online payments. This implies that an ever-increasing number of individuals feel happy purchasing online, digital investment and moving assets by means of electronic mediums. The expansion in movement of funds and online business adds to the advancement of the economy. For this reason, online endeavours are initiated consistently and, surprisingly, more are creating gains day to day.

Transparent:

Straightforwardness turns into a fundamental element with regards to payments. Furthermore, when you are involving the digital platform for tolerating payments, then, at that point, it becomes fundamental for you to keep up with transparency in your exchanges.

On account of digital payment, you don't need to stress over the record of your payment information's. Additionally, you can give the payment details to your clients in advance. So there will be less possibilities of confusion.

Safety:

Taking care of and managing in real money is a bulky and monotonous work. Alongside the risk of losing cash, there is the problem of conveying cash wherever you go and guarding it. With computerized payments, one can keep their money safe in internet-based design easily. These days, your cell phone alone is to the point of making and getting payments - because of UPI, net banking, and portable wallets. Moreover, most e-payment channels give customary updates, warnings, and statements for a client to track their money.

Innovation/Developments in Digital payment by RBI:

RBI carries out UPI for feature phones - you will never again require a smart phone or web for online payments:

Central bank of India has started UPI payment administration for feature phones.

This will make feature phone clients without the smart phone to the stage and empower them to pay online without requiring a web access.

The move will additionally fuel India's e-payment reception

The Reserve Bank of India (RBI) has carried out Unified Payments Interface (UPI) for feature phones. Following his declaration in December 2021, the RBI lead representative has now conveyed the guarantee of carrying the improved e-payment administration to non-smartphones in India.

The UPI payment framework was restricted to smartphones with web network till now. While UPI ended up being a hit for fuelling e-payments in the nation, its availability to the majority with non-smartphones was anticipated for quite a while.

Online payments by means of UPI isn't just protected, however it secures and works on the way we send and get cash. It additionally makes transactions consistent for new age application-based food conveyance, ride-hailing, online business and comparable administrations.

In the year 2021, UPI contacted record high exchanges, both in volume and worth terms. According to National Payments Corporation of India (NPCI), UPI handled in excess of 38 billion exchanges, adding up to ₹71.59 trillion.

With the start of UPI on non-smartphones, the exchanges are projected to develop much further in calendar year 2022.

Digital rupee-how might it be not the same as UPI payments:

CBDC is a computerized or virtual money. Finance Minister Nirmala Sitharaman, while introducing Union Budget 2022-23 on February 1, had reported that Digital Rupee or Central Bank Digital Currency (CBDC) would be given by the RBI in the approaching financial year.

Computerized Rupee will be the fundamental payment method that can be utilized for online payments instead of money/cash. "The payment rails like UPI, IMPS and so forth utilize the hidden money to move the assets. For this situation, it is normal that payment rails will cooperate with the digital rupee to guarantee a consistent payment exchange," said Mihir Gandhi, Partner and Payments Transformation Leader, PwC India.

At present, UPI transactions are made utilizing online correspondent of what might be

compared to existing money notes. That implies each rupee moved through UPI is upheld by actual money. "The computerized rupee will be lawful delicate all by itself and need not really be backed by actual money," said Sumit Gwalani, Co-Founder, Neobank Fi.

How the COVID Pandemic accelerated digital payments innovation:

The COVID-19 pandemic has driven online payments into another period as organizations all over the planet had to switch rapidly from in-store to digital. As an ever-increasing number of purchasers began to shop digital, installing the payment experience in client travels and overseeing payments framework have become critical to organizations in for all intents and purposes each industry.

Traders innovate:

The pandemic has constrained organizations to accept better approaches for drawing in and holding clients despite wild contest and tight edges. Subsequently, we have seen numerous non-monetary administrations suppliers install the payments experience in the client campaign to provide engaging, helpful, and customized administrations.

Titan Pay in India is an incredible example. Titan, a conventional watch-production organization, is offering the country's first wearable payment arrangement as a team with SBI Bank. This new contactless arrangement will reclassify the shopping experience for Indian buyers by empowering them to tap and pay immediately with their watches and stay away from any human contact in the payment cycle.

Likewise, Starbucks has as of late upgraded the Starbucks application, a notable award and reliability program, to further develop its client experience. Even with rising customer requests for additional choices to pay and procure rewards, Starbucks has presented an assortment of payment strategies. These incorporate Apple Pay, Google Pay, PayPal, and other e-wallets, as well as credit, debit, and loyalty cards.

Innovation in payment solutions to look forward:

To help development of new monetary items, Reserve Bank of India (RBI) thought of rules for an administrative sandbox. It welcomed fintech organizations to be essential for it and test their new items.

An administrative sandbox permits organizations to live test new items in a controlled climate. Controllers can see the whole interaction and settle on what to permit and what not to and an item's practicality.

Through pilots and field tests, the controller knows the advantages and dangers of new monetary advancements. This assists controllers with carrying out new standards rapidly to help the advancement of items.

The controller has shortlisted six organizations to test their imaginative items in its administrative sandbox. Here are the advancements to anticipate once RBI supports the fintech organizations.

RBI's FOCUS:

RBI is executing the administrative sandbox in three regions. One, where guidelines are missing. Two, where there's a need to relieve guidelines for empowering advancement. Three, the proposed development shows the "guarantee of facilitating or affecting monetary administrations delivery in a critical manner".

The regulator has additionally shortlisted a couple of areas of concentration, remembering fragments where there's a requirement for advancement for items and administrations, and it feels that the execution of innovation can help.

In the primary stage or first partner, the controller got 32 entries, and it has chosen six for the test stage. The principal stage's subject was retail transactions with an emphasis on mobile payments and transaction, offline payment arrangements, and contactless payments.

Developments USING NFC:

In November, two fintech organizations began testing their items. The other four expressed in November.

Among the initial two firms is Jaipur-based Natural Support Consultancy Services Pvt. Ltd. It has begun testing an item called eRupaya, which utilizes near-field communication (NFC) based pre-loaded card and Point of Sale (PoS). The organization has currently collaborated with Punjab National Bank for it.

The attention is on dealer and offline computerized payments in distant areas. It will assist with handling transactions through NFC without the requirement for web availability. The prepaid card can be recharged for a limit of ₹2,000 per day and ₹20,000 per month through

PNB's branches, ATMs, business journalists, etc.

Other Innovations:

Bengaluru-based Naffa Innovations Pvt. Ltd. involves sound waves for quick and safe exchanges. Marked as ToneTag, the organization utilizes scrambled sound waves to make offline, closeness based contactless transactions.

It tends to be utilized on any current gadget, including non-smartphones. ToneTag is trying offline payments to shippers by means of UPI. To make a transaction, clients need to tap their mobile on the ToneTag's gadget.

A sound wave is produced that conveys information, which is gotten by the vendor's gadget, and the transaction is finished. It works very much like NFC Payments. The organization has numerous licenses for the innovation it utilizes.

Bengaluru-based Ubona Technologies Pvt. Ltd. involves sound waves for quite a long time. One of their contributions is the check and distinguishing proof of clients utilizing their voice. The organization is trying voice-based UPI arrangements that can be person to person(P2P) and P2M offline transactions.

Ubona Technologies has likewise upheld (brooded) UltraCash, an organization that involves exceptionally high recurrence and indistinct sound waves for information move between two cell phones. The sound waves are radiated and gotten utilizing a phone's speaker and mic and can be utilized for payments.

The last organization that RBI has chosen for the administrative sandbox is Eroute Technologies Pvt. Ltd. situated in Noida. The organization is trying a UPI-based offline cell phone arrangement that utilizes a smartcard that has an implanted SIM. Transactions will be made utilizing the SIM Toolkit menu.

These six substances were important for the main partner of RBI's administrative sandbox. The national bank has begun tolerating applications for the second companion on 21 December 2020, which closes on 15 February 2021. The subject for this is crossline transactions.

Drawbacks of digital payments:

Risk of Theft:

It could cause privacy issues as you should share the entirety of your exchanges and account information with outsider administrations.

There could at times be an instance of your account being hacked and your cash being abused.

There have been numerous occurrences in which cybercriminals have controlled individuals and cash has been stolen.

Technical Problems:

As it is a web-based platform, it might go down because of technical or server issues and individuals who get 100 percent solid on this assistance for their transactions might confront a problem.

Remote Areas:

Far off regions depend on cash. You could find it problematic and troublesome in making payments in a hurry while venturing out to a few distant regions.

Services Charges:

Most of the time while utilising online payment administrations we are obligated to pay administration charges or a convenience expense which adds to our cost.

Objectives of the study:

- To conduct a study on digital payments
- To find out the different types and methods of digital payments and innovation payments.
- To study the consumer perception on digital payments
- To analyse the pros and cons involved in digital payments
- To study the innovations on digital payments

Findings

After the demonetisation happened in India in the year 2016, the government of India started to promote digital payment and encouraged the nation to switch to cashless economy. Slowly the entire embraced the digital payments due to it numerous benefits and ease of use.

The Nation worked hard towards a cashless society and promoted the Digital India initiative which the people embraced and accepted.

Based on the survey it can be seen that everyone uses digital payment in their everyday life.

Majority of the respondents seem to be using digital payment frequently in their life.

Their perception on digital payment are that its convenient and easy to use. Very few of the respondent expresses security or privacy concerns.

Most of the respondents are satisfied and trust digital payment.

When asked about which payment mode they prefer, most of the responses were both cash and digital combined. Because they feel that digital payment are still not completely accepted by everyone and everywhere. For instance, most of the cab or auto drivers are not happy with digital payments and prefer cash. Even in few shops, only cash payment is accepted and they do not welcome online payments

UPI is the most favoured payment method.

Most of the respondents have expressed that they have been using digital payments since two to for years, which can be seen as post demonetisation period.

When asked about innovation payments like Crypto or NFT, majority of them do not seem to use it and are not interested in it.

Suggestions

Most of them are concerned about security/privacy concerns and have been a victim of digital threats like hacking, phishing or online fraud. I feel the government must educate people on how to be safe and be better protected against these online frauds, scams and other threats. They must be severely punished. Government should encourage every merchants, auto drivers and every individual to accept and promote digital payments. Digital payments must be promoted in both Rural and Urban areas equally and educate them. Innovations on digital payments should be brought as early as possible and the public must be made aware of it. Senior citizens should be encouraged to use digital payments as it could help them in many ways. Innovation payments life NFT or Crypto should be promoted,

encouraged and supported in India as that will be the future of digital payments.

Conclusion

Digital payments have changed and revolutionised our lives in every aspect we cannot imagine. In the present time, it is the most preferred payment method for everyone all over the world. Day by day, it makes our life easy. Innovations in digital payments are being made continuously around the world and it must be promoted everywhere. It can be said that, in the future the entire world will become completely cashless due to the rapidly increasing innovations and technology.

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