

## **Digital Wallet: A handy Solution in the wake of Demonetisation**

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### **Abstract**

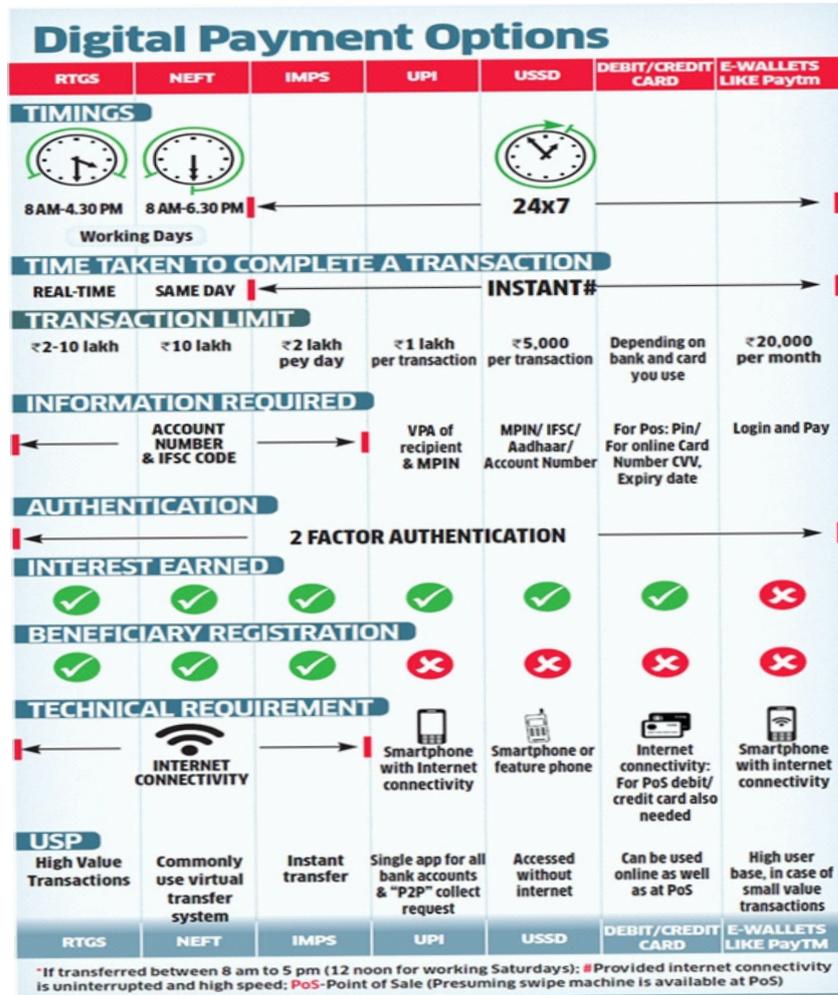
Demonetisation might have targeted black money and fake currency circulation but its biggest impact is being seen in the shift towards the digital economy, which will emerge as India's biggest long-term gain. Prime Minister's surgical strike on black money on November 8, 2016, changed all that. The country woke up to cash denial and cash shortage that inadvertently pushed them to seek out e-Wallet solutions. Increasing in popularity, and for good reason, the need could not have come at a better time for digital money service providers like Paytm, Freecharge, Mobikwik and many others. The revolution has begun and the end game could well see India surpass developed nations to emerge as one of the largest cashless economies. The proposed paper gives an overview of digital wallets, describes its working and reviews the various types of digital wallets available in India. The paper also discusses the merits and challenges of deploying a nationwide digital wallet solution in India.

**Keywords:** Demonetisation, digital wallet, economy.

### **Introduction**

Technology has comforted, upgraded and transformed the way monetary transactions are, and due to this, payment gateways and digital currency are becoming the norms. The future of money is electronic and it is the technology which has created this phenomenal change. Electronic payment system that replace cash and physical currency has been there but with the advancement in path of technology, there has come a shift in the way we think 'money' in electronic form, becoming more and more extensive whether it is paying for online or in store shopping or for one's lunch order, payment is not with cash but with digital funds. The digital payment sector has observed a trend over the years and through e-wallets, life has become much easier. Mobile or digital wallets will play an important role in our daily lives as with the ever increasing use of smartphones, people are getting dependent on digital lifestyle to make things easy and fast. Now, with the arrival of digital wallets, it has become highly useful and convenient for a person to make cashless transaction. There are a number of companies in India which are offering the service of 'digital wallet', still there is lack of awareness among the people about the utility of mobile wallets. Mobile phones have now made progress by being in everyone's pockets or handbags and will eventually substitute the physical wallets we carry. Though there are a number of challenges in getting acquainted or used to digital wallets but in the wake of demonetisation, it is not far to overcome as digital wallets are a great step towards financial inclusion in the country marching towards progress.

### Comparison of various Cashless Payment Systems



Transaction Amount	NEFT	RTGS	IMPS	UPI - Proposed	USSD	Debit and Credit Cards	E-wallets
Up to ₹5000	₹ 2.50	N.A.	₹ 5	₹ 0.5	₹ 0.5	An annual fee/renewal fee which depends upon the type of card you are using. No additional charges for use at PoS but additional charges are levied for online transactions	Currently no charges.
₹ 5000-10,000	₹ 2.50	N.A.	₹ 5	₹ 0.5	N.A.		
₹ 10,000 - ₹ 1 lakh	₹ 5	N.A.	₹ 5	₹ 0.5	N.A.		
₹ 1 lakh - ₹ 2 lakhs	₹ 15	N.A.	₹ 15	N.A.	N.A.		
₹ 2 lakh - ₹ 5 lakhs	₹ 25	₹ 25	N.A.	N.A.	N.A.		
₹ 5 lakh - ₹ 10 lakhs	₹ 25	₹ 50	N.A.	N.A.	N.A.		

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### **Overview of digital wallet**

Back to history, mobile wallet is developed from a concept called “Digital Wallet”. It dated back in 1996 when the founder of Digital Wallet, Sam Pitroda, filed the patent in the United States. Mobile wallets are the digital substitutes of physical or leather wallets in which debit, credit, prepaid cards, cash and other cards or coupons are carried. It is an online service which permits you to accumulate or store money, as money is stored in a bank account. A user needs to make an account with a digital wallet service provider after which money is added to the ‘digital wallet’ account using a debit, credit, online transaction from bank account or via cash. The two key drivers of Digital Wallets are Smartphone penetration and improved and affordable 3G and 4G services. With the strong presence of these two key drivers of digital wallets, the ecosystem of India is turning out to be immensely positive in the adoption of digital wallets. The major difference between a mobile wallet and online transactions via bank account is that, unlike banks, mobile wallet does not charge any amount of money on every transaction and saves the customer from the fuss of entering card details and pin number for each and every transaction. Some of the mobile wallet providers in India are Paytm, Citrus, Oxigen, Freecharge, Mobikwik, SBI Buddy, ItzCash etc.

### **Types of e-wallets**

As per the Reserve Bank of India, there are three kinds of e-wallets, that is, closed, semi-closed and open digital wallets.

1. **Closed Wallet:** A closed wallet is that which a company issues to its consumers for in-house goods and services only. These instruments do not carry the benefit of cash redemption or withdrawal. Various online shopping portals such as Jabong, Make My Trip and Flipkart offer such closed wallets. It is primarily an account where money gets credited in case of a refund due to cancellation or return.
2. **Semi-Closed Wallet:** Companies such as Paytm, MobiKwik and PayU offer semi-closed wallets facility. According to RBI, a semi-closed wallet can be used for goods and services, including financial services, at selected merchant locations that have a contract with the issuing company to accept these payment instruments. However, semi-closed wallets do not allow cash withdrawal or redemption to the holders.
3. **Open Wallet:** These wallets can be used for purchase of goods and services, including financial services such as funds transfer at merchant locations or at point-of-sale terminals that accept cards and also allow for cash withdrawals at automated teller machines or business correspondents. Such wallets can be issued by banks only. Vodafone m-Pesa is one such open wallet with ICICI bank.

### **Some Popular E-wallets And Their Benefits**

There are many e-wallets which became popular particularly after 8 November 2016, that is, after demonitisation and these are: Paytm, OLA Money, SBI Buddy, PhonePe powered by YES Bank, PayUmoney, ItzCash, HDFC Chillr, Airtel Money, Mobikwik, mRupee, HDFC PayZapp, Idea Money, Citrus Cash. Pockets by ICICI bank, LIME by Axis Bank, M-Pesa by Vodafone, Oxigen

Wallet, M-Clip by Bank of Baroda,, JioMoney by Reliance, JioFreecharge, DBS aka DigiBank, DigiPurse by Union Bank of India, Future Pay powered by Oxigen, Udio by RBL (Previously Shmart), RuPiZo by DigiBank and PayApt by IDBI Bank.

The most popular digital wallets are elaborated below:

### **Paytm**

Paytm got attracted among people when Ratan Tata and Alibaba invested in the company and since then, Paytm is the greatest payment platform in India. Paytm offers a plenty of options to make payments ranging from prompt mobile phone recharges to payment of shopping bills. It also offers the 'scan and pay option' using which one can make payments by simply scanning the QR (quick response) code. Today Paytm has partner tie-ups with Visa, Mastercard, RuPay, PCI, Safekey and Diners.

Demonetisation has forced a lot of places to accept digital payments and Paytm can be used to pay for:

- Mobile recharge, mobile payment, datacard recharge
- DTH recharge
- Utilities payments: electricity, gas and water
- Groceries; fruits and vegetables from street vendors
- Auto and taxi; app-based cab services
- Metro Card recharge, bus, air and train booking
- All insurance payments, buy gold
- Hotel bookings and restaurants
- Movie bookings
- Pharmacies and hospitals
- Pay school or college fees
- Money transfers or receipt to and from anyone with a mobile phone and app.

### **Mobikwik**

It permits customers to deposit money using a debit or credit card, offers cash collection services and performs net banking transactions. Mobikwik can be used for mobile phone recharges, payment of utility and shopping bills and to transfer money. It also offers cashless payments of Tatkal (instant) train booking through the IRCTC website.

### **Freecharge**

The company is a fresh recruit to the rapid-growing digital payment service providers' list. Launched in September 2015, Freecharge is similar to Paytm and Mobikwik in its merchant establishments although its initial focus has been more on the larger organized retail and food service establishments. Freecharge provides online payment services for mobile phone recharges, direct-to-home television services and data card services. Recently, it collaborated with Indian Oil Corp. for cashless payments for cooking gas deliveries across the country.

### **Oxigen**

It can be used to pay bills and present gift cards for numerous brands. Customers can also earn loyalty points that can be redeemed as cash into the wallet or as PayBack points. Oxigen has partnered with National Payments Council of India (NPCI) for immediate transfer of money.

**Airtel Money**

This app works for all telecom carriers in the country and permits customers or users to carry out transactions without the mPIN by just tapping on the mobile screen. It offers the provision to carry out transactions even if a customer has insufficient funds in the wallet, the user can load the money later. Airtel Money initially started by focusing on e-Wallet services for mobile related services but is now rapidly expanding into other areas too. The company has received a licence to start a payments bank business as well.

**Vodafone m-pesa**

It is one of the simplest, easiest and the most preferred means of sending money to family and friends. Vodafone m-pesa app offers other facilities such as payment of utility bills, DTH and online shopping.

**Chillr**

Chillr has partnered with banks such as HDFC Bank, Bank of Baroda and Federal Bank which allows its users to transfer money to their contacts' bank accounts, recharge phone connections and split bill payments among friends in a group. The latest update adds the "@"tag feature, which allows to send money to professionals, institutions, non-profit organisations, etc., or to anyone in the phone book even if the account number or the bank's IFSC code is not known.

**PingPay**

This app from Axis Bank enables to connect to multiple social media platforms. Axis Bank as well as non-Axis Bank customers can send money, ask for or receive money and recharge mobile across WhatsApp, Facebook and Twitter. Users can also customize their transactions by adding text messages, pictures, video or audio messages.

**State Bank Buddy**

The app includes features such as sending money to registered and new users, asking for payments and sending reminders to settle dues, transferring additional cash free of cost to an account of your choice, recharging and paying bills, booking movie and flight tickets and shopping. State Bank Buddy also provides an option of sending gifts to family and friends in India and abroad, without any shipping charges, from the available options, categorized according to occasion/festival.

**Reliance Jio**

Reliance Jio is the latest entrant in the e-Wallet business, having recently received its licence and plans to emerge as a major player in this segment. The merchant profile is more or less similar to that of Paytm's and Mobikwik's, but its market penetration strategy is likely to be wider and faster to close the lead with others.

**Digital or mobile wallet's Working**

The working of digital wallets is easy and quick as follows:

- i. Register with e-wallet company.
- ii. Add money to the e-wallet subject to maximum limit provided by the e-wallet company.
- iii. Put source of adding money (Savings bank account or debit/ credit card)
- iv. Put card number, CVV code or login through net banking and authorize payments.
- v. Once payment is authorized, amount will be credited to e-wallet from savings bank account or credit card account.

### Advantages Of Digital Wallet

- **Lower Costs:** Employing the use of digital wallets eliminates the need for intermediaries. Purchases in-store may no longer need a cashier as the purchasing process becomes easy at a tap or scan of a mobile device.
  - **Convenience:** Users are able to get through a purchase in nanoseconds with a simple tap or scan of their mobile device. The experience of purchasing items becomes quicker and easier. Furthermore with rapid transactions, checkout lines within stores become much shorter.
  - **Synchronization of Data From Multiple Platforms:** One can link their credit cards, debit cards and bank accounts and pay immediately with no fuss to enter the details each time. Bank accounts, credit and debit cards, mobile accounts and bills - all will be interconnected which help in better management. It's just like everything's under a single roof.
  - **Efficiency:** With a mobile wallet, remembering the card details will not bother now as under any e-wallet app that all goes away in just a tap and one can do as much shopping one wants to.
  - **Safety:** With encrypted passwords and security questions, money needs no longer to be kept under the mattress.
  - **Track the Expenditure:** Every sum spent on your versatile digital wallet is recorded automatically. To work on financial intelligence or ascertain how one is doing financially, this is an essential functionality of e-wallets that anyone can find useful.
- Digital wallets can do everything that cash or cards can do and way better with greater flexibility, faster speed and enhanced level of security and limited possibility of loss.

### Limitations of digital wallet

#### From User's Point:

- **Limited Merchants:** There are many digital wallets like Paytm, Mobikwik, Payumoney and more. Still, there are many online stores that don't offer digital wallets and Amazon is the great example in this list.
- **Security:** One of the biggest concerns of getting adapted to a digital wallet application is safety of transactions. This is the hindrance that one faces. More than connectivity, security issues are at the forefront in these days. People are always under the fear of misuse of their money by hackers and frauds. They always feel safer to have cash with them.
- **Dependent on the Devices:** As digital wallets can only be used online and via devices such as laptop, smartphone or tablet, so the use of digital wallets is highly dependent of the device. If one is unable to reach his smartphone or laptop due to battery problem or of any other reason, digital wallets are of no use. This is the main reason why digital wallets can't beat credit and debit cards.
- **Issue of Connectivity:** Mobile network connectivity is the biggest impediment. Network problems and reliable and fast internet connectivity is not available in most of the developing countries.
- **International Restriction:** Every country has different digital wallets so that one can't use other country's digital wallet to make payment while you're in other country. So, it can be a big hurdle for the ones who need to travel often to different countries. The challenge is that most countries have financial systems that are not compatible. Pay Pal is one such e-wallet which is not connected with most of the local banks.

**From Vendor's Point:**

- **Huge Investment:** The financial investment at the beginning to build functional digital wallet application is quite huge. It needs the initial development of the software as well as the ongoing maintenance, updates and fixes related to it. On acquiring software, the business would also require to install the corresponding hardware in their stores, which leads to an additional increase in costs.

- **Support Technology:** There are very few supporting technologies to choose at present, with NFC terminals and phone readers being the most accepted. In the case of digital wallets, they can only function with a corresponding hardware device for each application. NFC terminals and specialize scanners are the only devices created at present that will support the processing of digital wallet payments; thus, hurdling the wider use of digital wallets.

- **System Outages:** Information for digital wallets is stored on the cloud of business servers; therefore, the risk of malfunctioning in the system or shut down is always there. As a result, businesses will not be able to process payments or will become increasingly slow due to high traffic in the servers.

Demonetization is an opportunity but the technology side has to be supported with adequate investments from the government and larger private players.

**GOVERNMENT'S INITIATIVE TOWARDS DIGITAL****PAYMENT Aadhaar-based cashless payments app****BHIM – Joins DIGITAL DANGAL**

A new digital payments app has been recently introduced by the government known as Bharat Interface for Money (BHIM) which is based on the Unified Payments Interface (UPI). BHIM app is accessible only on Android. It is assumed to assist Aadhaar-based payments, where transactions happen just with an impression of fingerprint. BHIM app has a feature that allows sending and receiving money to other non-UPI accounts. In this app, money can be sent via Indian Financial System Code (IFSC) and Mobile Money Identifier (MMID) code to users who don't have a UPI-based bank account. There is also an option to make a direct payment and scanning a QR code. One can make his own QR code for a certain fixed amount of money, and then the merchant can scan it and the deduction will be made. BHIM app is not a mobile wallet. In case of mobile wallets such as Paytm or MobiKwik, only a limited amount of money can be stored in the app that can only be sent to the person who is using the same wallet. So in case, if anyone is using Paytm account, he won't be able to send money to the other person having some other app such as MobiKwik. But BHIM being based on UPI is linked directly to a bank account and one doesn't necessarily need to be on the BHIM app. One just needs a bank account to receive the payment. A maximum of Rs 10,000 can be shared per transaction, and a total of Rs 20,000 can be sent within 24 hours. Government has come up with several schemes to make people get acquainted with the BHIM app. One such scheme is the Lucky Grahak Yojana. Such initiatives will boost the people to get digital and to become India, a cashless economy.

**Future Of Digital Wallets in India**

The e-wallet business in India is going at a rapid pace. It has been estimated that e-wallet users outnumbered the accumulative number of credit cards in India within a short span of its From

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### **Government's Initiative Towards Digital**

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### **Future of Digital Wallets in India**

The e-wallet business in India is going at a rapid pace. It has been estimated that e-wallet users outnumbered the accumulative number of credit cards in India within a short span of its acceptability. It can be seen that the current mobile wallet market could rise tremendously in the coming years. A favourable feature of mobile wallet for a customer is that, it does not store one's card details. Also, limited amount of money can be kept in a digital wallet which protects the user

from loss if something wrong happens. The wave of digital wallet has spread so far that even Indian banks have also started launching their own digital wallets. Looking into the perspective of mobile phones penetration in the country and the increasing availability of affordable handsets for the population of the country, the digital wallets are surely going to rule over the following decades. A future of rising and shining India can be seen with the increasing boom and adaptability of digital payments among the citizens of the country.

### Conclusion

With the swift and extensive adoption of technologies, digital wallets will become more convenient and faster way to make payments. It looks like as if the digital wallets would become the most preferred way of making payments in near future. The revolutionary challenge of getting digital must be accepted by the nation. The world has been created by the way or processing of our thoughts. It cannot be changed without changing our mind-set and thoughts. Since digital wallets are going to be a phenomenal change, it's significant to allay our fears, reshape our thoughts and start adapting to such technological innovations to improve our productivity and efficiency when it comes to payments and money management.

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