

# Educating Consumers about Digital Wallets

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## ABSTRACT

Wallets have been used from thousands of years to protect and carry personal items of value. The earliest value wallets or satchels were a piece of cloth tied with a piece of string which enabled a range of items such as coins to be carried out to market. Humans have always been mobile and have needed a container to securely carry personal items.

People consume for both necessity and pleasure. Basic items such as food and clothing are purchased on a regular basis but people also buy goods which are only for enjoyment purpose.

For this instance, we have digital wallets which are online platforms that stores users' payment information and passwords and allows them to make electronic commerce transactions and make their life easy. Out of the many benefits of electronic wallets, few of the important ones are transferring money, paying bills and services like payment to cab services.

Apart from the goodwill gaining factors like ease of access and ease of use, it is extremely useful for huge unorganized sector where cash is considered as the most appropriate medium. People are from different backgrounds and respond differently when it comes to the use of digital wallets. Thus it is important for the organizations of the digital wallets to segregate the customer segmentation for the wallets as per the people who wants to use and respond towards the wallet.

Also after seeing so many frauds and cases recently related to cash, people feel that this is the future and will be the most famous mode of currency transaction.

**Keywords:** IAMAI, DTH, M-Pesa, Unbanked, Technically Illiterate

## INTRODUCTION

Digital wallet is a kind of software which resides on buyer's computer and holds digital cash and digital signature [1]. It is an online platform that stores users' payment information and passwords and allows them to make electronic commerce transactions. It acts as a digital organizer and contains information related to eIDs, digital signatures and certificates, logon information and billing and delivery addresses. This eliminates the need of physical presence of human beings to make any transaction. Users can make payments while sitting at their home or shop online through their devices. It is mainly technical infrastructures i.e. hardware and software, allowing the secure storage and processing.

Digital wallet is an umbrella term which covers online wallets and Mobile Wallets. Online wallets are digital wallets that are accessed through laptops or computers

and allows consumers to store their online shopping information like login credentials, shipping and delivery address and credit card details like card number, expiry date and card verification value. The payment process for online wallets is:

- When the user is doing payment for the first time, he has to register himself by providing his phone number.
- Online wallet provider sends an SMS with pin on his mobile phone and authenticates the number.
- After the successful authentication, user inputs his credit card information or another payment method if necessary and validates the payment.
- For subsequent payments the user re-enters his PIN to authenticate and validates payment.

Mobile wallets are digital wallets that are accessed through a mobile device. It is a service that allows consumers to make payments through hand held



devices. The payment process for mobile wallets is same as that of online wallets.

Undoubtedly, digital wallets are the latest payments innovation. It arises in the context of what is commonly known as the mobile revolution. As now the smart phones and other mobile devices are with everyone, this means that consumers have computing power at their fingertips and these devices are like their personal “control towers”, by using this they can manage their daily lives from listening to music and ordering transportation on demand. Digital wallets provide a way to move, pay money, and manage loyalty relationships. These are natural part of this electronic revolution. The rise of digital wallets and mobile devices suggest that consumers will be more in control of their everyday payments than ever before.

#### Most commonly used Digital Wallets in India

- **Paytm** – It all started with mobile recharge, bill payments and then partnered with Uber, book my show and make my trip for bookings and payments.
- **FreeCharge** – It allows consumers to recharge any prepaid and post-paid mobile phone along with electricity bill payments. It has now added a new feature i.e. metro card recharging.
- **Mobikwik** – It is also used to recharge mobiles and pay bills. It is also accepted across various merchants and has also partnered with Big Bazaar and Sagar Ratna to enable mobile payments.

#### Applications of Digital Wallets:

- *Payment for mobile bills and electricity bills* – Consumers can pay their mobile bills and also recharge their mobile phones through digital wallet like Paytm, Mobikwik etc.
- *Online shopping* – Consumers can shop online and make payments through digital wallets.
- *Transfer money* – Digital wallets also allows consumers to transfer money to other digital wallet accounts i.e. Paytm to Paytm money transfer.
- *Payment to cab services* – Cab Service provider like Uber allows consumers to pay for the cab bills through Paytm.

As per Reserve Bank of India (RBI) digital wallets come under the term of Pre-paid Instruments, in which you pre pay the amount and store it in a digital wallet/instrument so as to make the payments later[2].

#### What are pre-paid instruments?

Prepaid payment instruments are those which facilitate purchase of goods and services against the value stored on such instruments. The value stored on such instruments represents the value paid for by the holder, by cash, by debit to a bank account, or by credit card [3].

According to RBI Pre-paid Instruments are classified as

- **Closed Instruments:** In this the vendor and issuer is same. For example banks and their payment gateways
- **Semi Closed Instruments:** In this a third party is involved. The issuer collects the money from the consumer and uses this money to pay merchants. Example PayTM, Mobikwik. Money cannot be withdrawn from such instruments.
- **Open Instruments:** Only banks are allowed to issue such instruments.

#### Recent Developments

Earlier only banks and NBFCs were allowed to use pre-paid instruments. RBI has passed a master circular on 01-January-2015 giving permission to 197 companies to operate online pre-paid instruments [4].

#### Laws governing pre-paid instruments and digital wallets in India

Pre-paid instrument in India is governed by Payments and Settlements Act, 2007. Section 18 of the act empowers the RBI to make regulations as and when required.

RBI has laid guidelines for issuance and operation of pre-paid payment instruments in the master circular of 01-July-2014[5].

#### WHY ARE DIGITAL WALLETS GAINING FAME?

- **Ease of use** - It's like a one click pay with no need to fill in passwords and card numbers every time.

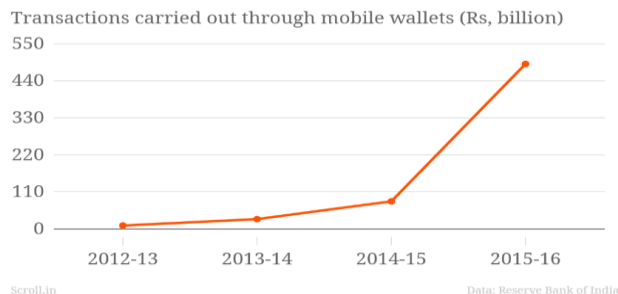
Users can recharge their digital wallet and pay immediately without any hassle to enter the details every time.

- **Ease of access** - There will be no need of physical wallet like we do in the case of cards and cash. Mobile wallets are also upgrading to allow you to store your documents digitally similar to DigiLocker like your Aadhar card, Driving License, Pan Card, etc.
- There will be no issue of asking or searching for change (fractional money) which we have while handling cash.
- It will be possible to make instant payments. We can exchange and transfer money anytime unlike banks as banks have operational time hours to carry out these transactions.
- There would be synchronization of data from multiple platforms. Bank accounts, debit cards and credit cards, mobile bills and accounts all will be connected together and help in better management. It is like everything under one roof.
- It is extremely useful for huge unorganized sector where cash is considered as the most appropriate medium. We can exchange money through mobile wallet at street vendors, small shops, etc. which can remove the need to carry cash/cards at such places.

**GROWTH OF DIGITAL WALLETS IN INDIA**

There has been observed massive growth in the adoption and usage of digital wallets as a mode of payment.

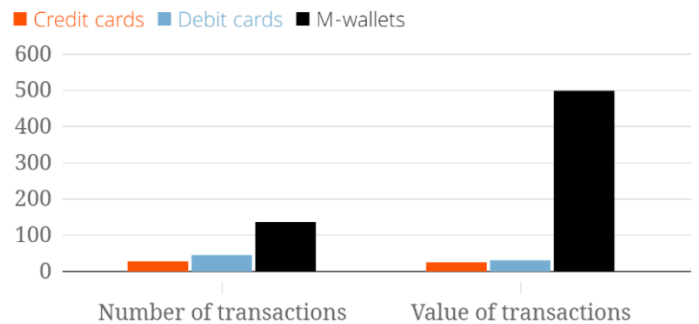
Reserve Bank of India published a data showing the number of transactions carried out through mobile wallets in billions [9] -



Wallet transactions have flown from Rs. 10 billion of transactions in year 2012-2013 to more than 480 billion of transactions in the year 2015-2016 [9].

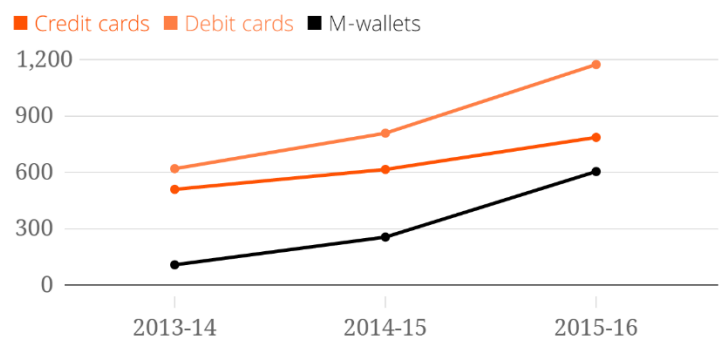
Below two charts show the growth statistics of different payment methods like credit cards, debit cards and m-wallets. It clearly shows that m-wallets is widely used now as a payment option.

Growth of different payment methods between 2014-2016 (%)



Scroll.in Data: Reserve Bank of India

Number of transactions (in millions)



Scroll.in Data: Reserve Bank of India

Though it has shown tremendous growth in terms of consumer adoption and usage but still many consumers are unwilling to use digital wallets as payment option.

**PRIMARY REASONS WHY CONSUMERS ARE UNWILLING TO USE DIGITAL WALLETS**

The vast majority of market research tells few things about consumers' expectations when it comes to mobile wallet technology like:

- Consumers want to know that their data is being protected. Security is always at or near the top of mobile wallet survey results; consumers

should feel confident that the technology they use is safe to use.

- Consumers also want to know that whether their payment methods will be accepted at a range of merchants. Consumers are less persuaded — and even dissuaded — by limited applications. If they are not sure that mobile wallet technology, or a certain mobile wallet app, will give them greater freedom, they won't be willing to add it to their payment resources.

There are three categories of consumers:

1. **E-illiterate people** – Consumers who lack skill set required to make efficient use of all of the materials, tools, and resources that are available online (e.g.: computer or mobile). [6] They are the people who doesn't know how to use electronic devices such as computer and mobile.

Reasons for not using digital wallets-

- Don't know how to use laptop, computer, mobile etc.
- Sometimes consumers don't have credit or debit cards, so they have to use Cash on Delivery and are unable to use Digital Wallets.
- Don't know how to install and use digital wallet.

2. **Tech savvy** – Consumers who are technically proficient and are well informed about the use of modern technology, especially computers and moile phones.

Reasons for not using digital wallets-

- Security Concerns like hacking, losing phones.
- Don't see any benefits of using digital wallets over just using cards.

3. **E-literates but hesitant to use** – Consumers who are well educated and modern but hesitate to use modern online technology whether it is computer or mobile. This category includes our general store shopkeepers, housewives etc.

These people use mobile and computer on daily basis but they don't use digital wallets due to reasons like security concerns.

Reasons for not using digital wallets-

- Security Concerns like hacking, losing phones.
- Don't know enough about digital wallets to take a decision.
- Don't think digital wallets are accepted at enough places to be useful/ worth it.
- Don't use credit cards or debit cards to manage finances.
- Have never used it before, so are hesitant to use.
- More comfortable with their usual payment method.

## ***EDUCATING DIFFERENT SEGMENTS OF THE SOCIETY***

### **Educating e-illiterate consumers**

According to a report published by Internet and Mobile Association of India (IAMAI) - IMRB International in February 2016, of the 306 million internet users. [13]

219 million are from urban and 87 million are from rural areas. [14]

The rural base went up by 93% from December 2014 to December 2015. [13]

The report also said that 52% used internet for entertainment, 39% for social network, 1% for online shopping and 0.4% for online ticketing. [16]

It can be easily observed that rural India is a big market for the digital wallet industry and easily availability of entry level smartphones is another positive towards this direction. Rural masses if made aware can bring a huge difference to the digital wallet industry.

### **The Digital Saksharta Abhiyan (DISHA) or National Digital Literacy Mission (NDLM)**

As per [www.ndlm.in](http://www.ndlm.in) Digital Literacy is defined as "Digital Literacy is the ability of individuals and communities to understand and use digital technologies for meaningful actions within life situations". [17]



With the mission of at least one digitally literate person from every household, NDLM with NGOs and other training partners are working to train rural masses in the use of digital devices like phones, tablets, sending and receiving emails, searching the internet for information.

### Digital Empowerment Foundation (DEF)

Is a partner in NDLM working towards improving the conditions of socio-economically backward communities? One of the world's leading practitioners in Information & Communication Technology for Development (ICT4D). [18]

### Educating e-literates but hesitant to use consumers

Basically there are two types of users in this category:

1. Who doesn't use online payment method
2. Who does online payment through computer but not through mobile

In second category of people, the main reason for not using online wallet through mobile is psychological. They feel safe while doing online payment through computers but not with mobile. The reasons are that while using Computer/desktop:

- They have an option to go incognito.
- They have a number of options of the website on a single page.
- When using mobile, due to the small size of the screen and less options, they feel insecure.

### *How to educate the educated ones?*

We can educate these people about digital wallet, how they can use these wallets. By few demos, we can show them that digital wallet in mobile phone is equally safe as computers/ desktops. To educate non-users, marketing and promotion programme can be conducted. We can educate them about the benefits of digital wallet. We can give users discount offers and rewards on making installment through computerized wallet. This will can build its prevalence and adoption also.

A lot of people are unfamiliar about different features of mobile. For these types of people, we can make awareness campaign about the features of digital wallets. We can give them demo of how to use the digital wallets for paying bills, ticket booking, shopping, mobile and DTH recharge [12] etc. They can also transfer money easily and safely. We can also make

advertisements about digital wallets. In these advertisement we can show users how to use the digital wallets and how to make them secure. Most of the people who uses mobile but doesn't use digital wallet, are afraid about the security. Because they think that digital wallets are not safe. So we can educate them about the securities of the digital wallet. Suresh Sethi, Business Head - M-Pesa, Vodafone says, "Our first crusade reporting the dispatch Vodafone M-Pesa in India - a progressive better approach for cash exchange. Also, the general target of the battle was to position M-Pesa as a quick, sheltered and simple method for exchanging cash. We got a staggering reaction to this battle." [10]

Some people don't believe or get impressed by the advertisement. We can also give them reference or example of people like them, who are using online wallets so that they can feel more confident and secure. We can also display security tips while using digital wallets for user awareness. Information security would be the essential test for portable wallet administration suppliers. Organizations need to always manage infection and hack assaults. They would continually need to consider even information security on the shopper front, for instance, unapproved access on a buyer telephone, telephone being lost and so forth.

We can educate them that digital wallet is more safe and convenient option than making credit/debit card payments online, where a long list of details have to be keyed in every time one wants to make a payment. In digital wallets more merchants are available.

It is imperative for versatile wallet players to comprehend exchange practices and make more up to date channels for on boarding new endorsers. We can coordinate computerized wallets with Uber and other administration suppliers so that numerous individuals subscribe to their administration. This course will get them a sizable group of onlookers [10].

Today, Vodafone have 90,000 outlets or keeping money journalists, 60% of which are in provincial India, and every one of them can money out. The Vodafone M-Pesa client training effort has been taken off in various markets in 3 stages - Gujarat, Tamil Nadu, Delhi, Kerala, Kolkata, Karnataka, Andhra Pradesh, UPE, UPW, M&G and Mumbai. Three day instruction camps are being sorted out in urban ghettos particularly in pockets with



ladies filling in as residential help or little efficient parlors, fitting shops [10].

### **Educating tech-savvy consumers**

This category of people has special affinity towards technology. They need someone to make them aware of the existence of digital wallets. Once they install the applications, the process of installation is self-explanatory and usage is much simpler than installation. Have a good description of the process steps.

Security, safety, theft or loss of phone as the main reason they're hesitant to use digital wallets. These concerns can be addressed with the assurance.

If you think that your money is not safe in your digital wallet, then you're not right here because all the wallets provide the password security service to lock your wallet

very well. And most of them offer the additional security to keep your money secure from unauthorized access.

**Tokenization** is another security feature used by the various wallet applications. The main advantage of this feature is that you need not share your credit card information. Instead a random code will be generated by the app called as random account number which is exclusively for that specific purchase and not related to the credit card. Even if someone by chance got access to skim through the data, all they will just get useless string of numbers that cannot be traced back to the credit card or buyer. Even though studies do not guarantee that digital transactions are foolproof but are considerably safer than the traditional magnetic swipe of a credit or debit card transaction. [19]

Now another concern is what if the phone is lost? It can be just as nauseating of a sentiment as losing a physical wallet as both phone as well as physical wallet hold personal information. As the "Big Three" digital wallet apps are created by the manufacturer of the phone (i.e. Apple, Android, Samsung), before reaching to security feature of your app, one will have to cross the wall of security features to unlock the phone. For additional safety, there is also the alternative for the wireless carrier to lock the phone, create a new password, reset the passwords or wipe up the content.

Another feather in the cap security feature is you can also install a third-party Virtual Private Network (VPN) app on your phone. A VPN has wireless communication

pass via a private channel and makes it more difficult for hackers to intercept a signal. [20]

A few more magnetic features that can attract consumers to use digital wallets are:

There are e-commerce sites like flipkart, amazon, idea gives attractive discounts if payment is made using digital wallets – a huge advantage of using digital wallet.

Usage of digital wallets will speed up the retail process, which will eliminate the lines at POS counters as one need not stop fumbling for their card or cash payments. And the amazing part is that these apps sync up easily with individual bank's app easily, exposing the transfer of money a breeze. It also allows the consumer to see all their transactions simply and undoubtedly as Techlicious reports.

### ***FUTURE OF THE WALLETS - REPURPOSING BANK***

To make it convenient for individual dealers to put in two factor authentication by performing as an intermediary, wallets have performed a necessity of gap function. A new customer accepting digital commerce in India on internet primarily will be transacting on an average to a low quality telecommunication networks without a great deal of experience in dealing with online firms or with agents looking at customer services in issues related to payments. There are situations where a great number of new digital commerce users shop from websites or using mobile applications about which they don't have much idea.

The user will have to share the debit or credit card details to every such dealer. Else the user can prefer to keep these card details secured only with one digital wallet or a limited few like PayTM, Mobiwik etc. At the time of processing payment the dealer can in turn invoke the Wallet APIs. It may happen that the number of clicks can increase by 1, but the customer will be assured that the wallet will guarantee the inviolability of the money transfer and if any discrepancy, there will be only one point of contact for their queries – that's the Wallet providers. The Wallet can progress from a transactional service to a trustworthy customer associate, accounting for monetary security and greatest efforts towards fraud protection, rather than solely a processing facility.

This explanation brings about another point that Wallet providers thinking are like a no accompaniments, partial service bank, rather than just an e-commerce interface. Indeed, RBI now gives them an alternative to actually turn into a bank - a payment bank. These banks will boost transfer of funds and banking for the unbanked, while majorly focusing on payment services.

KPMG in its white paper "#DigitalBanking" has given digital wallets a medium maturity score in India [21]. Maturity score is a qualitative assessment arrived at by considering two key aspects - Banks' effort to use the platform/technology and Customers' willingness to adopt that platform/technology. The same paper also says that m-wallet market is anticipated to grow at 225% CAGR to become US\$ 5.12 Billion by 2020.

The Indian mobile wallet market is expected to be more than INR12 billion by 2019, a significant increase from approximately INR3.5 billion at the end of 2014[22].

### **IMPROVISING AND CONCLUSION**

Digital wallets are rapidly getting to be standard mode of online instalment. Consumers are receiving advanced wallets at a fantastically quick pace, mainly because of convenience and ease of use. Technically knowledgeable customers are progressively requesting consistent and searching for arrangement that convey this. Doubtlessly 2016 will be an essential year as advanced wallets acquire far reaching acknowledgment. [15]

Google is upgrading Digital Wallet to make payment by Facial Recognition. By facial recognition, a new system being tested which does not even require the smart phone at all. The new system is being cleverly called *Hands Free*. It will cover the main concern of the consumer, i.e. security. By this system, people don't have to worry about the mobile theft because the authentication for the wallet will be done by biometric (facial recognition). At several locations, Google is researching with using cameras in stores to identify individuals with Hands Free digital wallets. And at some locations, Google is testing with cameras is store so that a payment can be made without even stopping. [12]

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