Chapter III

E-wallets – An Overview

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E-WALLETS – AN OVERVIEW

"E-wallets are transforming the way we live, work, and play, creating a cashless society."

- Sundar Pichai

An e-wallet is a type of card which works electronically and also which is used for transactions made through online mode. Its utility is the same as a credit or debit card. Virtual cash or cashless transaction is an upcoming technology that has seen tremendous growth in the past few years. Cashless payments are now becoming a popular trend in almost every field. Demonetization has forced a lot of places to accept digital payments. The use of e-wallets helps in moving away from a cash-based economy. In the process, all the transactions get accounted for in the economy, which has the effect of reducing the size of the parallel economy.

To address about Digital India, it is a leading program of the Government of India with a vision to transform India into a digitally empowered society and knowledge economy. It is launched by the Government of India in order to ensure that Government services are made available to citizens electronically through improved online infrastructure and by increasing internet connectivity or making the country digitally empowered in the field of technology. The use of digital payments has increased to some extent after demonetization. Digital wallets are expected to become the second most-preferred payment method by the year 2025. Some of the developing countries are already successful in creating a cashless society with significantly less sophisticated technology.

Due to technological advancement and revolution the concept of digital currency or cashless economy has been improved. While some countries are encouraging a cashless economy, some are still against it due to the challenges like cyber security, which is contrary to digital currency. But the path to the cashless economy is strong now. The growth of mobile usage of digital applications viz., UPI, digital payment platforms make this evident.

On top of that, the outbreak of COVID -19 has brought many changes in buying behaviour and purchase decisions among the general public.

"In a world of e-wallets, cash is becoming a relic of the past." - Warren Buffett

3.1 HISTORY AND EVOLUTION OF E-WALLETS

The concept of electronic wallets can be traced back to the late 1960s when the first credit cards was introduced. However, these early credit cards required physical copies and has not been not digital. In the late 1990s, with the growth of e-commerce, the need for secure online payment methods has been raised.

In the year 1997, when coco cola launched a few vending machines in Helsinki they made customers purchase through text message. Even though it is different from modern-day e-wallet transactions, it is believed as the origin and root of e-wallets. Companies like PayPal (1998) and Billpoint (later acquired by eBay and became part of PayPal) has been the first to offer online payment services that acted as digital wallets.

After that mobile devices has been used to buy movie and travel tickets, order food and hotel bookings. Around 95 million cell phone users have been using mobile devices to make their purchases over the course of time since 2003.

Google became the first main company to introduce a mobile wallet in 2011 with the help of near-field communications technology where consumers can make payments, earn loyalty points and redeem coupons. Even though the mobile wallet was used only on a particular phone model minority of merchants accepted it and it was proved to be popular. As smartphones became more prevalent, e-wallets continued to expand globally. In the year 2012, apple's passbook was launched though it was not for mobile payments. It was used for boarding passes, tickets and coupons. After two years,after the inception of Apple pay (2014) ,it was launched in the United States of America, then in United Kingdom and China. In addition to PayPal and Google wallet, several other international players like Samsung Pay (2015) and Amazon Pay (2017) emerged, offering contactless payment solutions. *(https://sociable.co/mobile/evolution-ewallets-history-benefits-withdrawals/).*

To cast up to this, a study from Juniper research has predicted that 4.4 billion consumers will be using mobile wallet globally to make payments by 2024. It is evident

from the facts and data collected by this leading website hailing from United Kingdom namely merchant machine that mobile wallets will be capturing a prominent place in world's fastest growing technological markets. The following table clearly depicts the growing trend regarding the usage of e-wallet applications.

Table 3.1

Growing trend regarding the usage of e-wallet applications

YEAR	USERS (in billion)
2015	0.4
2016	0.5
2017	0.8
2018	1
2019	1.4
2020	2.3
2021	2.307
2022	2.661

(Source : https://merchantmachine.co.uk/rise-of-mobile-wallets-2022/)

A study from Juniper research has also found that the total number of digital wallet users will exceed 5.2 billion globally in 2026, up from around 2.8 billion in 2022, representing strong growth of over 53%. (*https://www.juniperresearch.com/press/digital-wallet-users-exceed-5bn-globally-2026)*

3.2 E-WALLETS IN INDIA

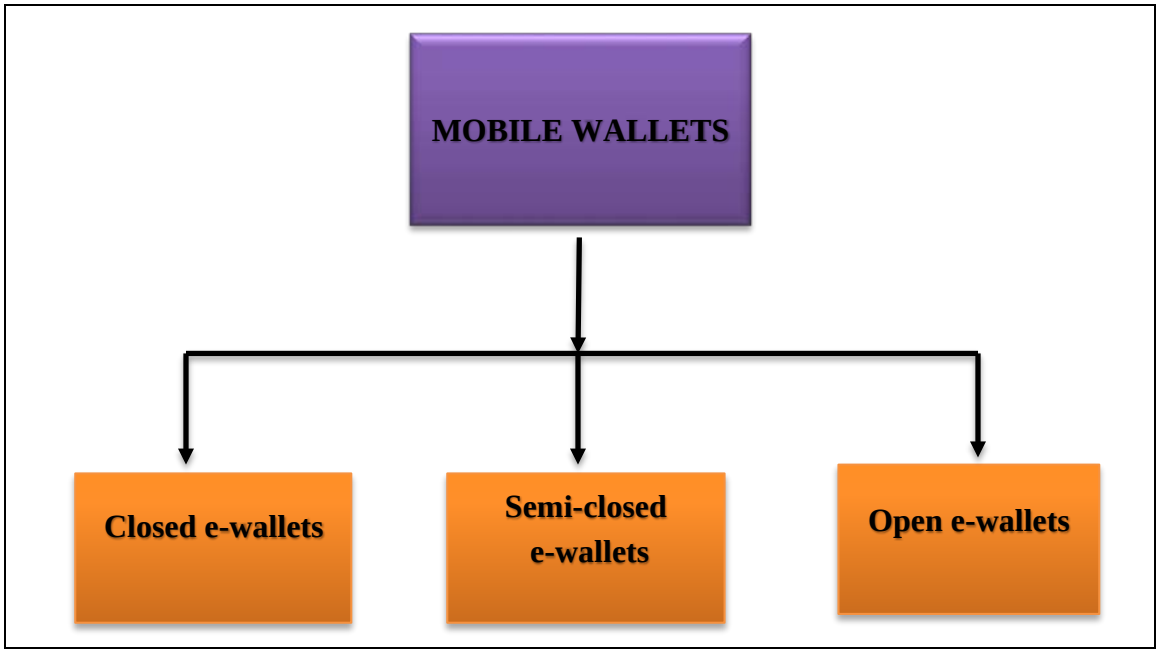
In India, digital wallets have revolutionized the way people conduct financial transactions and manage their money. One of the main factors contributing to the success of digital wallets in India is the Government's initiative towards a cashless society and promotion towards digital transactions. After the implementation of demonetization in the year 2016, adoption of digital payment methods has increased, which also includes digital wallets. Furthermore, the rise of affordable smartphones and widespread internet access has enabled a larger section of the population, including those from rural areas, to engage in the digital payment methods which promotes digital financial inclusion.

Types of digital wallets

Mobile wallets have been divided into three different types based upon the factors.

Chart 3.1

Types of mobile wallets



Closed e-wallets

A company's specific wallet is known as a closed e-wallet which is created by the organization. The amount in this wallet cannot be transferred or withdrawn but it can be redeemed against the buying and selling of goods. In this type of wallet, some percentage of the amount is locked with the company, in case of a cancellation or return of the purchase or gift cards. Amazon pay, Free charge and Ola money comprise the category of closed wallets.

Semi-closed e-wallets

In this type of wallet, the amount can be transferred to third parties, unused amounts can be transferred to a bank account and can be used to buy goods and services. Examples are Paytm, Phonepe, MobiKwik etc.

Open e-wallets

These wallets are created by banks or financial institutions and allow users to conduct transactions with any merchants that accept digital payments. It provides all facilities like semi-closed wallets along with an additional feature to withdraw cash from ATMs. This type of wallet is issued only by banks partnered with another major bank. Examples are SBI buddy, HDFC, PayZ app etc.

3.3 METHOD USED TO LOAD AMOUNT IN E-WALLET APPLICATION

The following are the guidelines which have been used to load an amount in an e-wallet application by an individual consumer.

Step 1: The application should be downloaded in the device.

Step 2: Sign-up by uploading the relevant information and the user will receive a password.

Step 3: After that money should be loaded using net banking or a debit/credit card.

Step 4: After shopping, the e-wallet automatically fills in the user's information on the payment form.

Step 5: Once the online payment is made, the user is not required to fill the order form on any other website as the information gets stored in the database and is updated automatically.

The following guidelines are followed by the merchants to incorporate the e-wallets in their respective business.

Step 1: The merchant should download the application on his/her device.

Step 2: Sign-up by entering the relevant data and then the user will receive a password.

Step 3: Allow yourself as a merchant and start accepting the payments.

Basic requirements for initiating e-wallets usage

- A bank account.
- A smart phone.
- 2G/3G/4G/5G connection and
- A free wallet application.

3.4 E-WALLETS IMPROVE FINANCIAL INCLUSIONS

Financial inclusion comprises access to financial products and services like bank accounts, insurance, remittance and payment services, financial advisory services etc. It provides individuals with the possibility to save for future stability and a high level of bank deposit which would enable a stable deposit base and opportunities to build savings and make investments. There has been an inclusive growth focused on financial inclusion.

Digital finance is a financial service delivered through mobile phones, personal computers, the internet or cards linked to a reliable digital payment system. Digital finance has the potential to provide affordable, convenient, safe and secure banking services. It also provides better control of customer personal finance, quick financial decision-making and the ability to make and receive payments. Financial inclusion is a win-win situation that is achieved through digital finance.

Mobile wallets have noticeably reduced the customer's dependence on physical money which has resulted in security. And also, it has also decreased risks related to cash handlings like fraud, loss and theft. To increase overall transparency many countries have eliminated the need for middlemen to transfer money by using e-wallets.

3.5 MERITS OF E-WALLETS

In a country like India, where differences are extreme ensuring financial equality becomes a major concern. One of the reasons why our Government started vocalizing the cashless economy and Digital India has been to improve access to financial resources. There are multiple benefits that digital payments bring to the table.

- **Better Convenience**

The most important reason to use an e-wallet is convenience. The usage of e-wallets reduces the burden of carrying physical cash or cards .Some of the wallets have the option of splitting the bill which helps to transfer and request money from friends. Also digital wallets store information for easy check out to shop in-store, online or in the application.

- **More secured**

E-wallets use advance security features like biometric authentication, OTP, face id and transaction PINs to protect users from fraudulent activities, Even if the smartphone is lost, data and money can be secured and can be accessed again from another new device.

- **Helps online traders**

Recently, more people have started engaging in forex and crypto currency trading. E-wallets have been a significant tool for online traders as they keep everything in one place. With a single click, money can be transferred into or out of any type of online trading platform.

- **Contactless Payment**

E-wallet support contactless payments making them especially useful during times when hygiene and contactless interactions are preferred such as during COVID-19 pandemic. Using a e-wallet is a faster payment option than paying by card and truly makes checkout stress free and contactless.

- **Access to rewards**

Most electronic wallets have been offering rewards and incentive programs. Discounts and coupons have been provided for certain purchases such as food, fuel, travel etc. Some e-wallets offer points systems that the user can exchange for cash.

- **Quick transfer of funds**

Electronic wallets help to make money transfers and payments rapid and easy. And also in some wallets there are no transaction fees levied to transfer money anywhere and anytime.

- **Perform multiple transactions**

All sorts of online transactions such as paying bills for electricity, gas, mobile recharge, FASTag recharge, DTH etc are done through digital wallets. Users can also perform transactions using a digital wallet by scanning the QR code at the point of sale or by adding a mobile number.

- **Easy refunds**

E-wallet streamline the process of refunds for cancelled orders or disputed transactions, it provides quicker resolution compared to traditional payment methods.

3.6 DEMERITS OF E-WALLETS

Even though there has been improved performance in this digital world there are still certain challenges that block it from achieving its potential. Some of them are as follows**,**

- **Security risks**

Security concerns exist on both the internal and external levels. The settings on a mobile device determine its security, therefore when in use, it should be safeguarded with robust encryption to prevent theft and unauthorized access to bank accounts or credit card funds.

- **Reckless spending**

Instead of physical cash when money is being electronically spent, people make excessive or unnecessary purchase.

- **Network coverage**

Mobile wallets can be used only with a speedy internet connection. Low coverage may interrupt the process and transaction alerts may not come in time.

- **Cyber-Security**

We cannot always be sure if the bank information used for internet payments is secure. Payment systems are targeted by hackers. The financial information on a smartphone is susceptible to hacking. So it is necessary to protect the data with Cyber-Security.

- **Remote areas still rely on physical money**

People especially the older generation and people living in rural areas prefer conventional banking methods. Transactions through cash have always been the traditional and most used method to purchase and sell in the remotest places in the countryside takes time to adapt to the new technologies.

- **Dependency on technology**

E-wallets rely on electronic devices and internet connectivity .If a user’s phone or service providers experience a technical issues, it may hinder their ability to make transactions.

- **Lack of customer awareness and understanding**

Many people have been lacking in the basic knowledge to use this digital payment in our country. Due to a lack of awareness people using digital payment methods can easily be hacked by cyber criminals. The RBI has emphasized the need for more customer awareness events.

3.7 RBI GUIDELINES ABOUT E-WALLET

The Reserve Bank of India regulates various procedures to provide a framework to manage persons operating payment systems. RBI ensures that the development of payment and settlement systems is in a wise and customer-friendly manner.

Statutory guidelines are issued by the Reserve Bank of India under Section 18 of the Payment & Settlement Systems Act, 2007. After obtaining the necessary approval from RBI bank and non-bank entities issues prepaid payment instruments in the country.

The guidelines on "Issuance and Operation of PPIs" issued in April 2009 have been amended from time to time, taking into account the developments in the field and the progress made by PPI issuers. All persons authorized to issue pre-paid payment instruments by the Reserve Bank of India are permitted to issue reloadable or non-reloadable pre-paid payment instruments depending upon the permissible category of PPIs.

As per the road map laid down in 2017, interoperability of all KYC-compliant Prepaid Payment Instruments (PPIs) was to be enabled in three phases

- Interoperability of PPIs issued in the form of wallets through a Unified Payments Interface (UPI),
- Interoperability between wallets and bank accounts through UPI and
- Interoperability for PPIs issued in the form of cards through card networks.

(Source: Guidelines for mobile wallet report by Reserve Bank of India (RBI) reported in Business today, Oct 16, 2018)

The Reserve Bank of India (RBI) issued consolidated guidelines for enabling all phases "In order to prepare better for implementation of interoperability". Interoperability refers to technical compatibility that enables a payment system to be used in conjunction with other payment systems.

Banks are permitted to issue and reload such payment instruments at their branches and ATMs against payment by cash/debit to bank account/ credit card and through their business correspondents appointed as per the guidelines issued by the RBI in this regard. Banks are also permitted to issue and reload semi-closed prepaid payment instruments through agents by cash/debit card/credit card, subject to the following conditions: The issuer may carry out proper due diligence of the persons before appointing them as agents for the sale of such instruments; the issuer shall be responsible for all their payment instruments issued by their agents and the pre-paid payment instrument issuers shall be responsible as the principal for all the acts of omission or commission of their agents.

Digital Financial Service

India is also one of the precursors of digital transformation and financial inclusion. A wide range of financial services is accessed and delivered through the digital system like payments, investments, transfer of funds and insurance. Mobile phones are used to access monetary services and execute financial information. This concept includes both transactional and non-transactional services. Transactional services are like transferring funds, making a payment, etc., and non- transactional services are like balance checking, statement viewing, etc.

3.8 FUTURE OF E-WALLET APPLICATIONS

The following points are factors affecting the future of digital payments application:

- **Digital revolution**

The advent of the digital revolution has made digital payment methods simple. As of March 2023, India had more than 1.10 billion active mobile connections and more than 600 million smartphone users. This number is definitely going to increase further with a faster internet speed. Digital transactions are being carried out in more remote locations as a result of the expansion of mobile networks, internet, and electrical power. There will be more digital payments as a result.

- **Government's support**

Digital payments are greatly encouraged by the Government. Some taxes have been cut, and incentives for using digital payments have been established. Government has

introduced the Digi Dhan Vyapar Yojna for merchants and the Lucky Grahak Yojna (8th November, 2016 to 13th April, 2017) for consumers. If the user makes a digital payment, they can receive cash awards of up to Rs. 1 crore. More people are demonstrating interest in digital transactions as a result of these incentives and reductions.

- **Convenient way to pay**

When compared to cash payments, digital payments are more practical. It is not necessary for the user to always carry a large amount of cash. He has the ability to pay instantly online. Everyone enjoys simplicity and comfort. Therefore, we can conclude that the future of fund transfers and financial activities is digital wallets.

3.9 LIST OF E-WALLETS TAKEN FOR THE STUDY

1) PayTM	6) Phone Pe
2) MobiKwik	7) Amazon Pay
3) Citrus pay wallet	8) Airtel Money
4) Free charge	9) Jio Money
5) Oxigen	

(Source: https://pmjandhanyojana.co.in/list-e-wallet-companies-india/)

1) Paytm

	Founded -2010
	Launched -2014
	Headquarters - Uttar Pradesh, India
	Parent - one97 Communication Ltd
	Website - Paytm.com

Paytm was founded as a prepaid mobile and DTH recharge platform and later elongated to a digital payments and financial services company with different types of facilities. It is a secure and RBI- approved wallet. It can be used to fulfill almost all financial needs. Money can be added to Paytm wallet through credit or debit cards, UPI

and net banking. And also, money can be sent from a Paytm wallet to a bank account or to another person's Paytm wallet. No extra charges are levied. It is a semi-closed type of wallet.

2) MobiKwik

	Founded -2009
	Launched -2012
	Headquarters - Haryana, India
	Parent - One Mobikwik systems Ltd
	Website - mobikwik.com

MobiKwik is a smartphone-based payment and digital wallet system it is an RBI-approved digital wallet and it has tied up with various retail and online merchants in our country. It is a safe and secured semi-closed virtual e-wallet. It also upkeeps the wealth management and credit facilities of the users.

3) Citrus

	Founded - 2011
	Launched - 2016
	Headquarters – Haryana,India
	Parent – Pay U
	Website - consumers.citruspay.com

The citrus wallet is an application that allows you to transfer and receive money. It is one of the leading applications for payments, cash storage and money transfer. Citrus is a prepaid payment instrument of PayU. It is certified by the authorization provided by RBI that it is easy to make offline transactions and bills can be split. Money can be gifted or sent to others in any part of the country it can be done free of cost.

4) Freecharge

	Founded - 2010
	Launched -2015
	Headquarters –Gurgaon,India
	Parent – Axis bank
	Website – www.freecharge.in

In the year 2015, Snap deal acquired Free charge and it was referred to as the second-largest buyout in the Indian e-commerce sector during that time. It is a RBI authorized wallet. A free charge is used with the help of an application or through a web browser. Other than online stores it offers offline stores like shoppers stop, McDonald's Cinepolis, and hyper city. Free charge wallet can be loaded with net banking, credit cards and debit cards and in the year 2017 on july 27th Free charge was acquired by Axis bank.

5) Airtel payments bank

	Founded - 2012
	Launched - 2016
	Headquarters - New Delhi
	Parent - Bharti Airtel, Kotak Mahindra bank
	Website -www.airtel.in/bank

Airtel payments bank has been given a license under section 22 by the Reserve bank of India under the banking regulation act 1949 on April 11, 2016. It is the first payment bank to receive a license. It started as a partnership between Airtel and Kotak Mahindra bank in a ratio of 80:20. It is a semi- closed wallet. It is very safe as all the transaction requires a secret mobile banking personal identification number.

6) Jio money

	Founded - 2015
	Launched - 2018
	Headquarters - Navi Mumbai, India
	Parent - Reliance industries
	Website - www.jiopaymentsbank.com

Jio Money is a secure and safe way to make digital payments. It can be linked to a bank account and cards. It is established under the banking regulation act of 1949 by the Reserve Bank of India (RBI). Then in the year November 2016, it partnered with the State Bank of India and incorporated Jio Payments Bank Limited. Reliance Industries and the State Bank of India hold a 70:30 partnership. We can make prompt payments, DTH recharges and can be used in many online and physical platforms.

7) Phone Pe

	Founded - 2015
	Launched -2016
	Headquarters - Karnataka, India
	Parent - Flipkart
	Website -www.phonepe.com

PhonePe is a financial technology and an Indian digital payment company it is a mobile payment application that is convenient and hassle-free. It has been launched with a partnership with Yes bank in the year 2016. PhonePe is licensed by the Reserve Bank of India and it is a semi-closed prepaid payment system. It can be used to pay DTH, prepaid and postpaid bills, flights, hotels, utility payments, etc. More than thirty banks are live on the UPI platform. The PhonePe application permits making transactions free of cost and exchanging or returning the product ordered and a refund can be received in the wallet.

8) Amazon pay

	Founded -2007
	Launched -2007
	Headquarters -Washington US
	Parent -Amazon
	Website -pay.amazon.com.

Amazon pay is an online transaction payment processing service owned by Amazon. It is licensed by Reserve Bank of India. It uses the customer base of Amazon and emphases on giving users the option to make payments with their amazon accounts on various other merchant websites. It is a secured payment service that can be used from various devices it accepts credit and debit cards and transfers from an amazon pay account balance.

9) Oxigen

	Founded - 2004
	Launched -2006
	Headquarters - Gurugram
	Website - myoxigen.com

The Oxigen is the RBI approved first online wallet which allowed users to add the amounts to their mobile wallet. It supports individuals to transfer money even if they don't have a bank account. These money transfers are in association with the National Payments Corporation of India using IMPS. There are various services including money transfers, mobile payments, utility bill payments, gift cards, travel, movie ticket booking and virtual visa.

The Government has taken various efforts to transform the Indian economy into digitalized economy .E-wallets plays the substantial role in that and after analyzing the previous studies, we have perceived that all of those researches were based on the availability of e-wallets or heeding to the weaknesses and strengths of availing it.

This research study is centered on the generation which is to understand the viewpoint of the people on e-wallets within the gap of two generations(Generation Y and Z).Hence, after identifying all the relevant studies done by the researchers, the study has been organized to obtain the opinion of e-wallet users from the 800 respondents (400 from Generation Y and 400 from Generation Z) from selected e-wallet service providers, namely., Paytm, Free charge, Oxigen, Mobikwik, Citrus, Phone pe, Amazon pay, Airtel money and Jio money.