



A STUDY OF CONSUMER ADOPTION OF DIGITALE-WALLETS - BENGALURU

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ABSTRACT

This paper aims to pinpoint the current development regarding E-wallets' significance in Bengaluru. An electronic wallet, sometimes referred to as a digital wallet, is a tool that enables swift and secure transactions in the world of electronic commerce. Your passwords, credit card numbers, email contacts, and other information like your driver's license can all be stored in e-wallets. In this paper, a suggestion for altering the future of cards is made, using the fundamental ideas of embedded systems. It is developed by using the foundation of condition-of-the-workmanship innovation to bring about changes in internal cycles and external interfaces. The days of waiting in line at banks in hopes that their turn will come to withdraw cash or store money are long gone. People may now go to the bank without waiting in huge lines, which is to their advantage and spares them from worrying about their finances. In the past, people were unwilling to modify their exchange habits when digital payment was available, but following demonetization, they were left with no choice but to conduct their exchanges using digital payment. The Bengaluru government pushed its citizens, either directly or indirectly, to do all commercial transactions online during the Demonetization phase. The general public began to switch from old payment methods to digital ones that offered simplicity, safety, and security. The Bengaluru market has begun to accept digital payments as a result of the enormous technology advancements in smartphones and accessible internet access.

Key words :

Digital wallets , digital payments ,E-payments ,online payments, electronic commerce, commercial transactions, Demonetization

I. Title of the project: Consumer Adoption of Digital wallets in Bengaluru

II. Introduction

An emerging technology that has grown significantly over the past few years is virtual currency. In practically every industry, cashless transactions are increasingly becoming more and more common. The software known as a "Electronic Wallet" is installed on the buyer's computer and contains digital money as well as a certificate with a digital signature for shipping, invoicing, and payment details for online transactions. Digital wallets are helping economies transition to a paperless society. Additionally, electronic and mobile wallets are a more advanced, digital counterpart of traditional physical wallets that hold hard currency. E-wallets for payments cut down on the expense of handling and storing currency for merchants. Online merchants have started offering enticing discounts and reward deals to entice customers to make cashless purchases. Retailers on the online marketplace have influenced more clients to select a different payment option from Cash on Delivery.

Digital Banking is the new worldview that offers significant advantages to banks as far as expanding benefit and efficiency just as to its clients regarding simplicity of payments and admittance to the banking administrations 24*7. A digital wallet, also known as e-wallet, is an electronic device, online service, or software program that allows one party to make electronic transactions with another party bartering digital currency units for goods and services. Money can be deposited in the digital wallet prior to any transactions or, in other cases, an individual's bank account can be linked to the digital wallet. Cashless society describes an economic state where financial transactions are not conducted with money in the form of physical bank notes or coins, but rather than digital currency, crypto currency is used. The Digital payment system is now became the essential part of banking transaction. The Digitalization is need of country because it is important to develop the financial sector as per the modern age.

Past few years' smartphones are having a tremendous growth due to accessibility and availability of the internet. The mobile wallet providers like Paytm, PayPal, Mobikwik , etc. with the payback schemes also attracting many consumers to use e-payment modes aiding the organisations with significant growth. The digital wallets are further enabling economies to a cashless society. Electronic wallets and mobile wallets are moreover digital version of the hard cash in physical wallet with more features and functions. E-payments wallets reduce cost of cash holding and handling for the retailers. Retailers on online platform have introduced lucrative discounts and cashback offers to get payment orders for all the cashless payments. The online platform retailers have encouraged more customers to choose a payment mode other than Cash on Delivery, it also helps a business to retain their customer. Consumers will return to the same website where his or her details are stored for making payments, this way the transaction process reduces making the online shopping smoother.

This study will help e-wallet users, providers, marketers, and policymakers understand the key components, opportunities, and difficulties involved in order to enhance the system's level of customer service. Policymakers and e-wallet service providers can use the data to build strategies that will allow e-wallets to succeed in international markets.

III. Review of literature

1. **Rathore (2018)** in her research has advocated that digital wallet are quickly becoming mainstream mode of online payment. More and more shoppers are adopting digital wallets at a very rapid pace. It is being done due to convenience and ease of use. Tech-savvy shoppers are demanding more seamless retail experiences.
2. **Dr. Hem Shweta Rathore (2016)** in her research paper “Adoption of digital wallet by consumers” found that customers use mobile wallet because of convenience, one touch method, and because of its time saving technology. Risk, Challenges and factors influenced consumers in adoption of digital wallet were also discussed in this paper.
3. **Padashetty, D. S. & Kishore, K. S. (2018)** widely discussed in their research paper “An empirical study on Consumer Adoption of mobile payments” that trust, expressiveness and perceived ease of use, playing a crucial role in facilitating adoption of digital payment solutions are the factors motivating to adopt of mobile wallet.
4. **Pralay Mondal (2017)**, Senior Group President Retail Banking. Yes Bank, said "Prepaid wallets will increasingly replace cash in the near future. They will not replace debit or credit cards, but will be used for specific needs and micro transactions."
5. **Neeharika P & V N Sastry (2015)**, conducted a study on “A Novel Interoperable Mobile Wallet Model with Capability based access control framework”, this study makes an important contribution towards the development of a mobile wallet that can work across various platforms. As security is the major concern when it comes to finance related information, the study addresses the security issues by giving access control model that works towards interoperable mobile wallet.
6. **Shwetu Kumar, Vijay Yadav-Ur-Rahman, Aditi Bansal (2016)**, made a study on “Paytm”, it studied about its achievements, technical architecture of paytm, working and technologies of paytm which include a study on supply chain management, web technologies of paytm, web based tool of paytm and also described about electronic payment system.
7. An article that was published **on 9 December 2016 in The Bengalurun Express** under Brand solution section stated that Digital wallets are for those with some experience of the way digital transactions work. The unlettered, the elderly. and those without smartphones will be largely left out. Poor connectivity and patchy Internet are serious challenges.
8. **Rai, N., Ashok, A., Chakraborty, J., Arolker, P., &Gajera, S. (2019)** found safety and security of payment in mobile wallet attracts customers to switch over from the traditional methods.
9. **Chauhan Pinal (2019)** has studied E-Wallet: The Trusted Partner in our Pocket. According to him the key of success of this payment method are security, anonymity of transactions, the cost of transactions, as well as the plurality of functions (payment, travel card, e-key for building access, etc.). but still he feels that e-Wallet still has some disadvantages in terms of interoperability and standardization of security and formats
10. **Priyanka Jain (2019)** provides a systematic review of literature on digital banking adoption published from Jan 2005-2018. The 100 relevant studies appear in 53 journals and represent a reasonably deep view in the field of digital banking acceptance research. Different models, theories and frameworks are used to study different attributes, constructs and various factors that promote the adoption of digital banking and risk associated with its usage. The research paper shows that the consumption of wireless banking will increase immensely and the target audience is the youth. The reason for this is the youth adopts technology faster. The literature on mobile banking or digital banking is lacking the study on varied age groups or professions. The relationship between e-payment, e-banking and m-banking is still not clear.

IV. Statement of the problem

1. As part of the government's "Make in Bengaluru" initiative, RuPay cards, wallets, and Aadhar-based instalment systems should receive special consideration. The government should eliminate the assistance fee on credit cards and prepayments.
2. As cellphones become more and more prevalent, internet payments have grown in popularity.
3. Some people may lag behind this faster-moving digital environment due to a lack of expertise about internet applications.
4. Considering how young e-wallets are in this day and age, many people still don't fully understand the advantages of cashless transactions.

Public authorities should be in charge of handling the proficiency issue above all else, thus we must establish a strong educational system from the start. By implementing and creating stricter criteria with regard to digital protection, another issue of cybercrimes and network safety should be addressed. Every region of the nation needs to be made aware of the new e-wallet ways. The government must obtain an efficient and transparent e-instalment framework. The government and RBI use these tools to facilitate credit-only transactions by approving instalment banks and developing mobile wallets.

V. Need of the study

Every aspect of the modern world has been redefined by technology in order to improve and simplify lifestyles. Modern times have seen the digitalization of previously paper-based and metal-based payment methods. Mobile-based payments are increasingly supported by the Bengaluru government as part of the Digital Bengaluru goal. It makes mobile wallets more relevant to a new area of study and will also be useful for other academics to know other topics on this subject as it is a relatively new area that has had great growth in the years since its adoption.

VI. Objectives of the study:

1. To find out whether Bengaluru going cashless has helped our citizens
2. To analyse the impact of digital wallet system in Bengaluru.
3. To see if Bengaluru will end up being an effective credit only economy
4. To find out the maximum no of users of E-wallets in Bengaluru.

VII. E-Wallets at Bengaluru context

What do you mean by E-wallets or Digital payments?

Electronic wallet is known as an e-wallet. It is a kind of digital card that is employed for online purchases performed using a laptop or a smartphone. E-wallets serve the same purpose as credit or debit cards. To make payments, an e-wallet must be connected to the user's bank account. Both the payer and the payee use digital

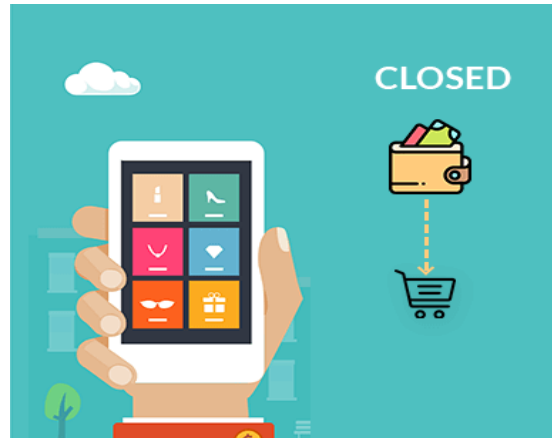
methods to send and receive money while making digital payments. It is sometimes referred to as electronic payment. Digital payments are made without the use of hard currency.

What are the most innovative types of Digital Payment Methods?

(1) Closed Wallet

Figure 1

Closed Wallet



A company selling products and/or services can develop a closed wallet for customers. Users of a closed wallet can use the funds stored to make transactions with only the issuer of the wallet. The money from cancellations, returns, or refunds is stored in the wallets. Amazon Pay is an example of a closed wallet.

(2) Semi-closed Wallet

Figure 2 semi-closed wallet



A semi-closed wallet allows users to make transactions at listed merchants and locations. Although the coverage area of such wallets is restricted, both online and offline buying can be done through the wallets. However, merchants need to enter into agreements or contracts with the issuers for accepting payments from the mobile wallets.

(3) Open Wallet

Figure 3 open wallet



Banks or institutes partnered with banks issue open wallets. Users with open wallets can use them for all transactions allowed with a semi-closed wallet in addition to withdrawal of funds from banks and ATMs and transfer of funds.

E-wallet authentication methods;

- **Username and password PIN.**

Username and password have become the defector of standard for identification of individuals in the online world ranging from email to e-banking websites. These passwords are independent of a physical medium or device which makes them suitable for online identification.

- **Digital Certificates.**

Digital certificates were specifically designed for electronic identification and are effective in a closed system. Their value depends on the credibility of the trusted party which issues them and the procedures which must be followed before they are issued.

- **Biometric, Voice Recognition, Retinal Scanning and DNA matching.**

The new forms of identification come in the form of biological measurement. Electronic fingerprint scanning using biometric devices on PCMCIA card has already reached production.

Prototypes of Digital Wallets:

- **PayPal One Touch™**

Figure 5: paypal



The PayPal One Touch™ app is an extension of the usual services offered by PayPal. It enables users to make payments or transfer funds faster by allowing them to skip the login screen and eliminate the need to enter passwords. PayPal's mobile wallet app can also be operated on a desktop, laptop, or tablet.

- **Apple Pay**

Figure 6: apple pay



The Apple Pay digital app is streamlined and available exclusively for users of iPhones, iPads, and Apple watches. It allows users to make transactions for both online and in-store purchases. For in-store transactions, users can unlock their phones and hold them near a compatible point of sale system. The Apple Pay app enables a seamless and secure way of payments, providing ease of experience.

- **Google Pay**

Figure 7: google pay



The Google Pay app enables users to make transactions on an app or any website using debit or credit card details saved to the users' Google Account, Google Play, Chrome, YouTube, Android phones, and watches. The app also supports other electronic documents such as student ID, movie tickets, gift coupons, store cards, and transportation tickets.

- **Paytm**

Figure 8: paytm



Paytm wallet is a secure and RBI-approved digital/mobile wallet that you can use for multiple purposes. It is like digital cash that you can utilize for any kind of consumer payment. You can add money to the Paytm wallet

through UPI, internet banking, or credit/debit cards. Also, you can send money from a Paytm wallet to a bank account or another person's Paytm wallet.

1.4 Privileges of E-wallets:

- It offers more convenience for many consumers.
- It provides access to other types of cards.
- It can be used at most retailers and online stores.
- It could help you with your budget.
- It requires users to authorize every transaction.

Obstacles of E-wallets:

- It doesn't eliminate your security risks.
- It may charge you more to process payments.
- Dependent on the Devices for battery life
- Danger of losing your Money/Smart phone.

In addition to the uses of a physical wallet, the electronic wallet needs to satisfy the core requirements of providing payment and authentication in online transactions initiated from any Internet-enabled device. Once this is achieved the electronic wallet will be extended to provide a range of "value-added" services. The electronic wallet is destined to become the virtual representation of a person on the Internet.

1.1. Conclusion

The popularity of e-wallets is skyrocketing because of how convenient they are in today's hectic world. Despite technological advances, many customers still prefer paying with cash because they believe it to be safer than using an electronic wallet. This is the perspective of the older generation in comparison to the younger generation. Everything has advantages and disadvantages, just like everything else. As responsible users, we must exercise good judgement and be knowledgeable about the E-wallet we employ since this is an electronic software which will help us to make transactions instantly which eases in which eases in quick payment in both offline and online store hence e wallets or digital payment application are preferred modes due to their ease of use and wide range of applicability

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