



Survey on E-Wallet

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ABSTRACT:

An e-wallet refers to software, electronic device, or online service that allows individuals or businesses to make electronic transactions. Digital wallets store all users' payment information in a secure and compact format, reducing the need for physical wallets. Digital wallets require users to download a digital wallet app onto their smartphone or another physical device.

Keywords: E-wallet, digital currency, fast-growing, Mobile payment

1. INTRODUCTION:

An electronic wallet or digital wallet is used to transact money through online mode. India's first e-wallet was oxygen wallet in July 2004 and it was reworked by Media Times Group In Association in July 2006. In starting of its launch it failed. The inventor who patented the concept was Sam Pitroda, who invented the digital diary in the 1970s[1]. In 1997, Coca-Cola brought a new ideology called vending machine in Helsinki which allowed the customer to purchase their product through text messages. We think the e-wallet concept was formed by this kind of transaction done earlier. By 2003, companies like Apple, and Google started launching. Traditionally, a customer sees a product, inspects it, and then pays cash, check, or credit card. In the world of e-commerce, customers don't see products at the time of the transaction, and the method of payment is made electronically. Online paying (EPS) allows customers to pay for goods and online services using embedded hardware and software systems. The main objectives of EPS are to increase efficiency, improve safety and improve Customer convenience and ease of use.

2. CONCEPT OF WALLET:

An E-wallet or Electronic wallet is a type of electronic card which is used for electronic transactions quickly and securely over the internet through smartphones and computers. [2]E-wallet allows e-commerce websites as transaction tools for their business.

Firstly these e-wallets are used as a method of storing money in electronic form and are now it most popular form and convenient way for online shopping. Eg: PayPal, SBI Buddy, google pay, etc..., For shopping people, it's hard to fill up orders with the same information for each item they buy. No need to re-enter the credit card number and address at all times. It would be nice if This information can be processed automatically. The main purpose of e-wallets is for paperless money-making and easier operation. E-wallets are commonly used by online shoppers and are available in the market for pocket, handheld computers, laptops, and desktops. They are safe Handy and mobile tools for online shopping and also store personal and financial information such as credit cards, passwords, e-mail contacts, bank accounts, PIN codes, and more. E- wallets have lower costs, use the use of wallets eliminates the need for intermediaries. The app provides more convenient transaction treatments for clients, giving companies using this technology a competitive advantage in the market. This opens a whole new aspect of payment methods in the general market, introducing many business opportunities and more potential income. There will be synchronization data from multiple platforms, bank accounts, Credit and debit cards, mobile accounts, and bills will be connected and contribute to better management. Here It's as if everything is under one roof.

1. Figure: evolution of e-wallet**3. CATEGORIES OF E-WALLET:**

- **Closed Wallet:**

Closed wallets allow users to pay through apps or websites. They are usually created by companies that sell products or services to their customers. Closed wallet users can only use the stored funds to transact with the wallet issuer. If the transaction is canceled or refunded, the full amount will be stored in the wallet. The closed wallet does not allow users to make payments outside of the wallet.

E.g. Flipkart, or Amazon.

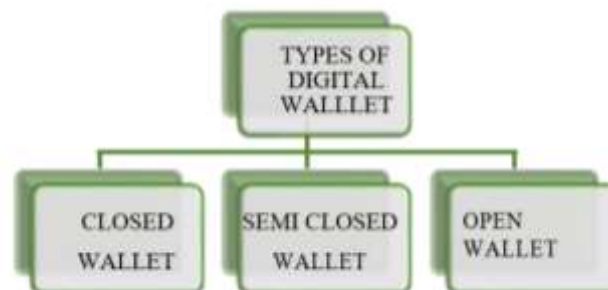
- **Semi-Closed Wallet:**

Semi-closed wallet allows users to easily transact at the point of sale. Semi-closed wallets have limited coverage. To accept payments from the wallet, the merchant must agree to a contract or agreement with the issuer.

E.g. Paytm, Airtel money, etc[7].

- **Open Wallet:**

Banks offer open wallets that can be used to make any kind of transaction. Open wallets provide easy money transfers. Payment can be made online and in-store at any time. An open e-wallet service provider that allows users to transact from anywhere in the world. However, the sender and receiver must have an account on the same app. Eg. MasterCard, VISA, RuPay, etc.



2. Figure: Types of e-wallet

4. ENSURING SECURITY AND RELIABILITY :

E-wallets are protected with many layers of device security, including API private keys [8]. Security may be compromised if your device is lost or stolen. If you used credentials to log in, know that at least your digital payment data is safe. No matter what, you should be able to provide your device ID number (your International Mobile Equipment Identifier [IMEI] or Mobile Equipment Identifier [MEID] number) to your phone carrier, who can then disable your smartphone and digital payment apps.

5. ADVANTAGES OF E-WALLET :

1. **Convenient:** Customers can complete a purchase conveniently. You only need to tap for a matter of seconds. Connect your device to the payment device or have your smartphone scanned to purchase the things you're purchasing. therefore, the experience of acquiring goods becomes more expedient and easier, resulting in an increased sense of satisfaction. Additionally, with speedier transactional activity, checkout lines inside Stores get somewhat shorter.
2. **Security:** E-wallets guarantee users high-security features, considering using a PIN, password, or fingerprint scanner to authorize each transaction. No need to share your details with anyone online or offline. Information is stored via a third party. If you lose your device and get a new one, you can still access your e-wallet.
3. **More options:** Digital wallet applications offer customers a more convenient way of processing transactions and provide a competitive advantage in the market for companies using this technology. It redefines the user experience of payments and includes a novel aspect of every purchase. Free charge allows you to spend your digital cash in multiple locations. B. Train tickets, bus tickets, gas, water, electricity, etc. Therefore, e-wallets offer a variety of options and save time.
4. **Low cost:** Digital wallets eliminate the need for various forms of intermediaries. The checkout process can be simplified by simply tapping or scanning a mobile device, potentially eliminating the need for cashiers for in-store purchases[9].

6. DISADVANTAGES OF E-WALLET:

1. **Retailer Restriction:** The number of retailers that accept payments from e-wallets depends on the actual wallet you choose. There is no doubt that a lot of people are using cashless payment methods across the country, but some retailers are yet to add digital wallets to their phones. And there are even many online stores that don't offer e-wallet payments and so customers are forced to use their debit/credit card details.
2. **Fees** Some apps may charge you for making a transaction. generally offer all cashback offers which can only be transferred to the bank after paying the fee.
3. **Support Technology** NFC Terminals and dedicated scanners are the only devices created at this time that will support digital wallet payment processing; so it's very limited because the technology is still new[10].

7. USES OF E-WALLET:

Pay bills for electricity, gas/bottles, mobile phones, etc.

Travel reservations for flights, trains, hotels, and more.

E-commerce transaction Pay at the point of sale

Transfer money to another account or bank account

Transfer money abroad according to certain instructions

Buy a subscription

8. GROWTH:

There were more than 779 billion fintech digital transactions globally in 2020, and this number is expected to grow at an annual rate of 13% in the following years. As the reliability of digital wallets increases day by day, it will be interesting to see what the future of payments looks like [3]. A recent study by market research and strategy consulting firm Blue Wave Consulting revealed that the Indian mobile wallet market is worth \$30.1 billion by 2020. According to the research, the market is expected to be worth \$30.1 billion by 2020 the grow at a CAGR of 46.3%, generating revenue of \$429.2 billion and expected to complete in the year 2027. Mobile wallet transactions have skyrocketed after the government turned off monetization between Rs 500 and Rs 1,000 in 2016 [9]. The Government of India has provided individuals with a variety of digital wallets including UPI, BHIM, Aadhaar Pay, and Payments Bank which has reshaped the payment process. As a result, the Indian mobile wallet market is booming due to the growing number of smartphone users and growing consumer awareness of convenient payment options through mobile wallets. . [4] Furthermore, merchants are using mobile

wallets with fast speeds due to established infrastructure and lower transaction fees compared to traditional card-based payment systems. However, poor internet connection, limited internet access, and risks related to cyber security can seriously hinder the growth of the market [5].

9. CONCLUSION:

In addition to using physical wallets, an electronic wallet is providing online payment and authentication. A transaction initiated from an internet-enabled device. Once this is achieved, an e-wallet will be created. It has expanded to offer a variety of "value-added" services. E-wallets are destined to become virtual currencies Representation of a person on the Internet. Electronic Wallet can be accessed from any internet get an access point and become the authorized owner e-commerce agency.

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