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A Comprehensive Analysis of E-Wallet Usage Among Youth

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Abstract: *The Digital Payment systems surge has reshaped the financial habits for people, especially youth. The usage habits, preferences, and security perceptions of e-wallet users between the ages of 18-24 are investigated in this study. A survey was given to college students and other related individuals. The data obtained based on the responses was then used to provide insight into youth consumer usage patterns. The research conclusions offer a basis to understand how e-wallets influence users' financial transactions and also know more about their thoughts on data security related to e-wallets..*

Keywords: E-Wallets, Digital Payments, Mobile Payments, Youth Behavior, Cashless Transactions, Security and Privacy, Two-Factor Authentication, Biometric Authentication, Fraud Prevention, QR Code Payments, NFC, Online Transactions, Cybersecurity, Digital Economy, Payment Trends, Consumer Trust, Mobile App Security, E-Commerce Payments, UPI, Cashback and Rewards, Contactless Payments, Financial Transactions, Bank Transfers, Loyalty Cards, Data Privacy, Risk Awareness, Authentication Methods, Financial Literacy, Security Patches

I. INTRODUCTION

The rise of e-wallets and other digital payment solutions has revolutionized financial transactions. E-wallets have emerged as a convenient and secure alternative to traditional payments. E-wallets allow users to store funds digitally and make payments through mobile applications thereby reducing the need to carry physical cash. The widespread availability of smartphones and the internet has increased the adoption of e-wallets especially among youth more inclined towards technology-based financial solutions. E-wallet platforms like Google Pay, PhonePe, and Paytm have gained popularity for various reasons like seamless user experience, fast transactions, and additional benefits like cashback and rewards.

The increasing dependence on e-wallets among young users further highlights the importance of understanding their usage patterns, preferences, and concerns. While e-wallets have many advantages it still has certain limitations. Many users remain skeptical about security-related issues such as unauthorized transactions and data privacy concerns. Security features like Two-Factor Authentication (2FA) and biometric verification play an important role in building trust among users. Understanding these factors can help improve the adoption and effectiveness of e-wallets in the digital economy.

Despite the widespread usage of e-wallets, some users still lack awareness about their full potential. Certain features like multi-currency support, financial management tools, and document storage remain unnoticed or underutilized due to limited user education. Addressing these gaps can be done through better design, accessibility improvements, and educational initiatives which can further enhance user experience. The ease of making payments through e-wallets and the increased acceptance of digital transactions in various sectors suggest that e-wallets will continue to play a significant part in shaping the future of digital transactions.

This study aims to analyze e-wallet usage among youth in India, mainly focusing on their preferences, security concerns, and expectations for additional features. By gathering survey-based responses and analyzing those responses and obtaining valuable insights, this paper provides a comprehensive understanding of how users engage with e-wallets and what improvements can be made to optimize their experience.

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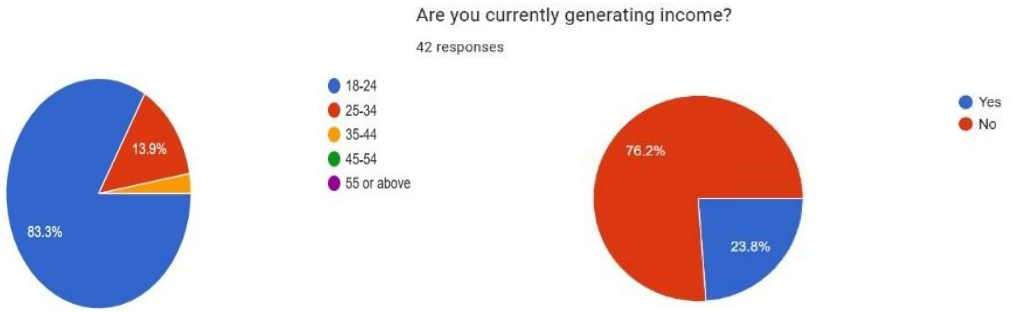
II. METHOD

The authors of this study employed a qualitative research approach by distributing Google Forms to examine how e-wallets are used by young people and different age groups, and they drew conclusions from the data.Some of the major questions that were asked during the survey includes:

- Which e-wallets do you currently use?
- How frequently do you use e-wallets for transactions?
- What types of transactions do you typically use e-wallets for?
- How important is two-factor authentication (2FA) to you when using an e-wallet?
- How confident are you that your personal and financial data is protected when using an e-wallet?
- How concerned are you about the risk of unauthorized transactions or fraud when using an e-wallet?
- How often do you update your e-wallet app to ensure you have the latest security patches and features?
- How frequently do you update your e-wallet password or security settings?
- Do you use additional security measures like app locks or VPNs when accessing your e-wallet?
- Do you store personal details, such as identification documents or addresses, in your e-wallet?
- Does your e-wallet offer biometric authentication methods, such as fingerprint or facial recognition?
- Are you familiar with touch-and-pay methods, such as NFC or QR code payments?
- Which types of documents do you store in your e-wallet?
- Do you use your e-wallet to store loyalty cards, coupons, or other rewards?
- Are there any specific features or functionalities that you would like to see added to your e-wallet to make it more useful or convenient for you?
- What concerns or issues do you currently face while using your e-wallet, and how do you think they could be addressed?

III. RESULTS AND DISCUSSIONS



Based on the responses received, most of the respondents are from the age group 18-24, 16% from 25-34, and a few from other age groups. And among them, 23.8% are generating income, while the remaining ones are not

About 40% of respondents use e-wallets weekly, 31% use them daily and the rest use them monthly or rarely according to their needs. Most of the payments done by using e-wallets are for purposes like online shopping, domestic payments, in-store payments, and bill payments. By this, we can understand that respondents use e-wallets on a day-to-day basis for a variety of purposes because of ease of use, which also helps to reduce their hassle in carrying liquid cash.

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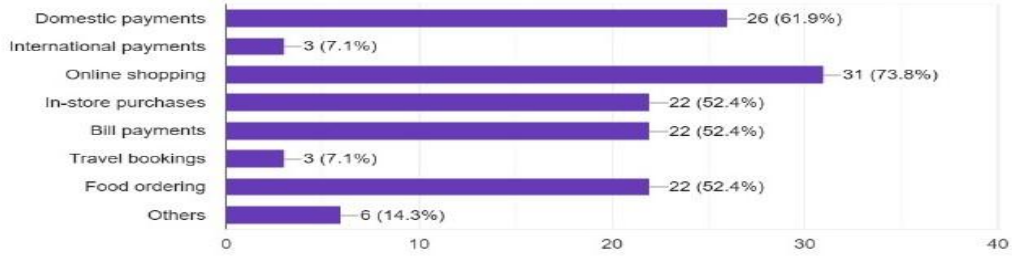
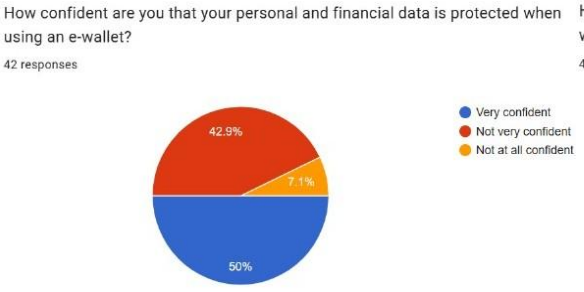
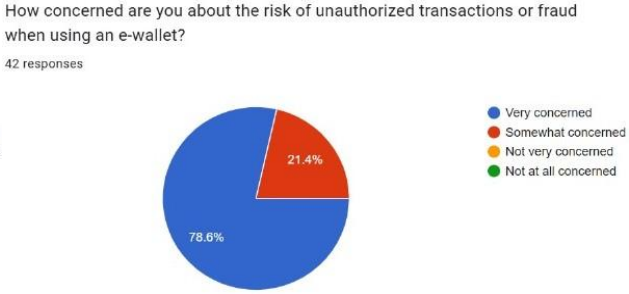
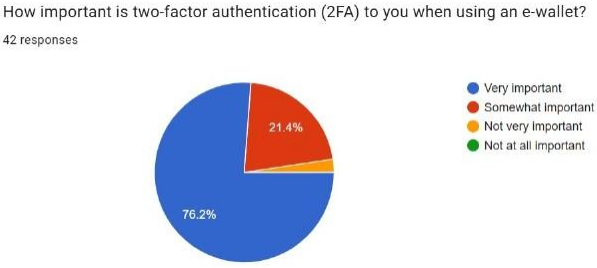


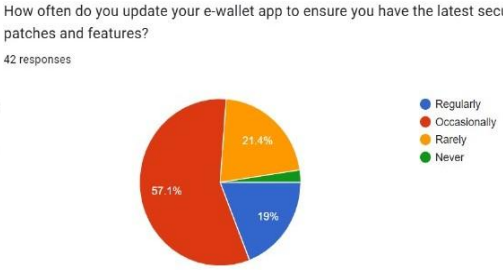
Most of the respondents prefer using Google Pay and the next closest competitors include Paytm and PhonePe. Google Pay faces its toughest competition from PhonePe. It's the second largest payment platform in India with around 34% of the market share but it's falling miles behind its competitor, PhonePe. Apart from PhonePe, there are other competitors such as Paytm, Cred, and other similar apps from various banks and firms that act as Google Pay's competition. Google Pay is widely preferred due to various facilities like payments using QR codes and phone numbers, rewards and cashback, Bank-to-Bank transfer, and even self-transfer, paying online bills, etc. Also, Gpay is pretty fast and easy to use and transactions can be done easily without much hassle, security features are good too.





Based on the responses to questions related to security concerns we can see that almost 50% are confident that their financial data is protected while using an e-wallet but still almost 42.9% are still not very confident about data safety. And another reason why most are concerned while using e-wallets include the risk of unauthorized transactions or fraud and this still seems a major concern among users. Almost 79.6% of users are concerned about the occurrences of fraudulent transactions. The largest threat to your digital wallet is the connection that allows you to transmit your data across your mobile network. If proper security is not in place, hackers can hijack the payment information while it's being transmitted. Another major threat is when your phone gets hacked or when it's lost and lands in the wrong hands it can lead to misuse of sensitive information.





Respondents prefer using 2FA for an added layer of security.2FA also known as Two Factor Authentication, requires a second verification form, such as a text message or an app notification, and the password. This dual-layer security significantly minimizes the chances of unauthorized access, as the attacker would need more than just the password to gain entry. Users also respond that they prefer updating at least occasionally to ensure that their security-related features are up-to-date so that they can reduce risks and ensure their sensitive data is not compromised.

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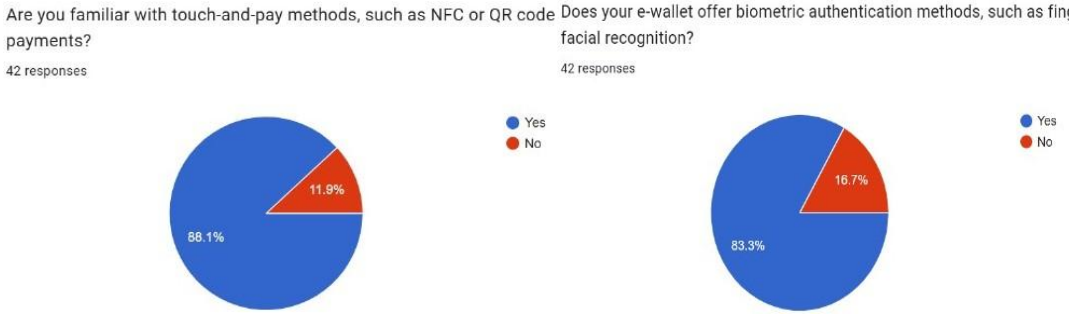
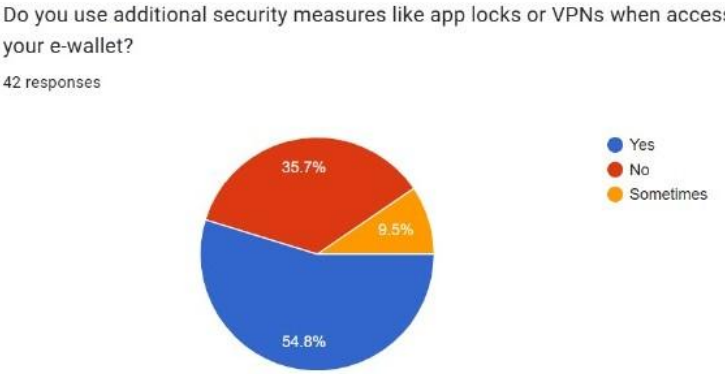


We also asked the respondents about whether they use NFC or QR code, or are familiar with biometric authentication methods like fingerprint and facial recognition. Almost 88% are familiar with QR code and NFC. 83% of people are familiar with fingerprint and facial recognition techniques. These techniques usually help in protecting the user from unauthorized access to their accounts.



Additional methods like the use of VPN and app locks are used by almost 54.8% of respondents denoting how much-concerned people are concerning keeping their transactions and e-wallet accounts safe. Public Wi-Fi can be a hotspots for cybercriminals to intercept your data. These networks are inherently insecure and should be avoided for sensitive transactions, including digital wallets. Use a secure, private Wi-Fi network or a VPN when accessing your digital wallet to ensure the highest level of security

Almost 73.8% of respondents don't use e-wallets to store identification documents or addresses but the rest have confirmed using them as a means for storing important documents along with using it for digital transactions. Touch-and-pay is a form of contactless payment. In which you have to tap your contactless chip card, or in a payment app on your mobile phone to execute a transaction. This is a fast and easy approach to making payments and based on our survey almost 54.8% of respondents have tried using the touch-and-pay method for making digital transactions

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A digital ID wallet is like a virtual wallet where you can store your digital identification documents and credentials such as your driver's license, certifications, or professional licenses.It allows you to easily access and share your personal information without having to carry physical copies of your documents with you. You can also use it to verify your identity when logging into websites or making online transactions.About 66.7% of respondents are aware that e-wallets can store documents. The majority of users use them to store personal documents like ID cards. Other documents stored include credit/debit card information, Insurance cards, loyalty cards, travel documents, etc.

IV. ENHANCING E-WALLET ADOPTION AND SECURITY AMONG YOUTH

Based on the results of the survey several areas for improvement in e-wallets have been identified. These concerns have to be addressed which can lead to enhancement in user experience, increase in trust, and motivate further adoption of digital wallets among youth.

Enhancing Compatibility—Many respondents expressed their concern that e-wallets need to be more accessible for different phone models. Therefore, optimizing e-wallet applications for various operating systems will attract more users and increase their adoption rate.

Improve User Awareness—A fraction of users also indicated that they lack knowledge about certain e-wallet functionalities. Educating users through various interactive means, such as detailed guides, FAQs, and easy-to-understand in-app tutorials, can help bridge this knowledge gap and make e-wallets more accessible and secure.

Strengthen Security Measures—Concerns about fraudulent transactions remain high. Features like Two-Factor Authentication (2FA), biometric verification, VPN usage, and secure network access can provide users with measurement and reduce security risks.

Add Value-Driven Features - Respondents highlighted adding features like multi-currency support and money-saving tools as favorable additions. Implementing features like currency conversion for international transactions and also expense tracking tools can enhance the e-wallet experience.

V. CONCLUSION

E-wallets have greatly transformed the way young consumers handle financial transactions, and offer convenience, security, and reward coupons. The survey results indicate that most users prefer using e-wallets for everyday transactions through apps like Google Pay, the most preferred platform due to its ease of use and additional features like QR code payments and bank transfers. However, security concerns are still a challenge, nearly 80% of respondents expressed fear about fraudulent transactions. While many trust e-wallet security features like Two-Factor Authentication (2FA) and biometric verification, still a significant portion remains cautious about the thought of data privacy risks.

As digital payment technologies continue to evolve, improving security, usability, and accessibility will be a key way to ensure e-wallets remain a preferred payment method for youth. By integrating these enhancements, e-wallet providers can provide a seamless, secure, and efficient digital ecosystem that meets the needs of modern consumers.

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