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Research Article

A Study on Consumer Perception towards use of E-Wallet in Nagpur City

Ms Madhuri Barua[1], Dr Aarti Deshpande[2]
[1]*Research Scholar,*
G H Raisoni University, Amravati, Nagpur
madhuri.barua@raisoni.net
[2]*Director,*
G H Raisoni College of Business Management, Nagpur
aarti.deshpande@raisoni.net

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ABSTRACT

E-wallet as part of a rapidly integrating financial technologies has become the key enabler of change across many sectors and industries, impacting business processes and consumer buying habits. The present work aims to analyze the attitudes towards the e-wallets in Nagpur city with specific regard to their effects on business facilitation and the consumers' convenience. The paper looks into variables that facilitate the use of e-wallet, ease of use, security, convenience, speed and how these characteristics improves customers' satisfaction and profitability of organisations. A survey in both structured quantitative form and follow up interviews were conducted among consumers and prospective business owners in Nagpur. The study shows that convenience, ubiquity and automation aspects are key drivers to the adoption of e-wallet, while the factors such as security concern and technological glitches act as inhibitors. The study also explores e-wallets systems and their impact of cashless society, effectiveness in business transactions as well as the convenience to the buyer. The findings in this paper are useful to policymakers, e-wallet service providers and merchants intending to encourage the use of digital payments in urban areas.

Keywords: E-Wallets, Business Ease, Consumer Comfort, Customer Perception, Digital Payments, Nagpur City

INTRODUCTION

This digital payment solution, especially e-wallets, has slowly changing the sphere of global financial services. E-wallets also referred to as digital wallets are electronic substitutes for actual wallets to facilitate money transactions through mobile phones and any other device. They have changed business activities and purchasing patterns by providing simplicity, swiftness and effectiveness. Owing to the government-backed projects like Digital India and much popularity of the smartphone device and the Internet, the e-wallets in India have strengthened its foundation of the digital platform for payments.

The city of Nagpur is one of the main cities of Maharashtra and has undergone a rapid process of digitization in the last few decades. From traditional stores selling small items to large scale enterprise, the city is fast embracing e-wallets as a measure of operational convenience and to also meet the growing expectations of technological wise customers. At the same time, consumers are using e-wallets in order that they can drive simple, fast, and safe payments. Nonetheless, this trade trends towards a positive feature, but still, there are several crucial problems, such as privacy issues and cybersecurity, and the unwillingness of those clients who have used only cash payments.

This study seeks to investigate the adoption of e-wallets in Nagpur city, focusing on two major dimensions: There are two categorizations, namely: (1) Business Convenience and (2) Consumers' Shopping Experience Convenience. Furthermore, it is helpful in realizing the factors that would make or break the implementation of e-wallet through customer perception in terms of security, trust and ease of use and technology literacy.

In achieving these objective, this research seeks to give a glimpse as to how the future holds up for digital payments and its impact towards the business practitioners, consumers and the policy makers. The suggestion given in the

research study will benefit the e-wallet service providers to enhance the prospects as per people's expectation and help more and more individual to adopt e-wallet leading to cashless society.

LITERATURE REVIEW

In their 2022 article titled "A Study on Adoption and Issues Faced by College Students in Using Mobile Wallets at Madurai District," V. Kamalajyothi and S. Valli Devasena sought to understand the factors that contributed to the adoption of mobile wallets among college students, as well as their degree of use and the challenges they encountered. The 384 college students from the Madurai district in the Indian state of Tamil Nadu were the subjects of the data collection. The majority of students used electronic wallet applications for everyday purchases during the COVID-19 pandemic, according to their survey. Another finding from the survey is that students' biggest concern when using e-wallets is the possibility of a payment failure due to the bank server being busy at the time of the transaction. However, students prefer using electronic wallets because of how much simpler and more handy they are.

Using a representative sample of Indian consumers, Deepak Chawla and Himanshu Joshi (2021) conducted an empirical examination of the elements that impact a consumer's attitude and desire to use mobile wallets. According to the findings, mobile wallet attitudes and intentions are significantly influenced by elements such as perceived utility (PU), perceived ease of use (PEOU), trust, security, enabling circumstances, and lifestyle suitability. Fifteen of the seventeen ideas put out found support. In contrast to PU's substantial impact on trust, attitude, and intention, ease of use had a substantial impact on trust and usefulness. Researchers discovered that trust is heavily influenced by security.

The study "An Empirical Analysis towards the Adoption of NFC Mobile Payment System by the End User" was carried out by Debajyoti Pal et al. (2020). Finding out what factors affect consumers' intentions when it comes to mobile payment systems like Samsung Pay and Apple Pay was the main objective of the study. The model presented here has two variables devoted to system-oriented considerations and four variables devoted to user-oriented considerations. Respondents who scored high on the inventiveness scale reported the mobile payment system as being very user-friendly. The results showed that the two most important factors in people using the mobile payment system were how beneficial they thought it was and how easy it was to use. While early adopters placed a premium on how easy the product was to use, late adopters considered how beneficial the product was to be the most important factor. Mobile payments were still in their early stages, therefore early users were still uncertain about the system's worth. By waiting until new technologies were widely utilised before trying them out, late adopters played it safe; they also need more training to become acclimated to the technology.

From her on the behaviour of Paytm users in Salem City, Kavitha. R. and Rajeswari. R. (2019) Focussing on mobile wallets and the initiatives like Digital India and demonetisation that have aided in their acceptance, the provided text explores the rise of digital payment systems in India. It emphasises Paytm as a prominent and widely used digital payment gateway. Also included in the article is a research that looked at how Paytm wallet users behaved before and after demonetisation in relation to the wallet's features and use. Although the research found that users exhibited favourable behaviour towards wallet qualities, it also found that use levels declined after demonetisation, which might be explained by the government's deployment of the Unified Payment Interface (UPI). Paytm could streamline the process or app for wallet account money transfers, according to the text's advice.

Research by Subho Chattopadhyay, Payal Gulati, and Indranil Bose (2018) sought to measure the familiarity and use of cashless payment methods among small-scale retailers. How hassle-free a cashless system is for retailers to utilise and what they need to know before making the switch. There may be a lot of knowledge about cashless transactions and the capabilities it offers, but that won't change the fact that very few firms are really using them. Very few transactions take place using cashless instruments, and there is a huge gap between the businesses that have little turnover and those that have high turnover. In general, merchants preferred cash transactions over cashless ones. The potential for fraudulent transactions and financial loss is the main concern that retailers have when it comes to using cashless transactions.

The majority of individuals, particularly the younger generation, prefer to purchase necessities using smartphone or laptop, according to research by Dr.Lokinder Kumar Tyagi, Saurav Mehrotra, and Rishabh Agarwal (2018). This is the reason why there is a proliferation of businesses happening at a dizzying rate. Online purchasing has become a lucrative enterprise for several organisations. The focus of the study is on the consumer's perspective and their

thoughts on the primary goal of E-utility wallets' usefulness. From the consumer's point of view, this research has attempted to address both the degree of pleasure and the risk factors associated with e-wallet purchase. Empirical examination of the primary function/usage of e-wallets, customer happiness, and risk factors associated with e-wallet use are the goals of the current research.

"Intention to adopt WeChat Mobile Payment Innovation towards Indonesia citizenship based on China" was the subject of study by IkraminaLarasatiHazratiHavidz et al. (2018). Finding the behavioural intent to utilise mobile payments was the goal of this research, which used the UTAUT2 model. Exogenous factors such as social impact, enabling conditions, performance and effort expectations, and anticipated outcomes were considered in this research. The endogenous variable was the behavioural intention to utilise Wechat mobile payment. Researchers found that the Facilitating Condition was a strong predictor of Behavioural Intention. The enabling condition and behavioural intention were found to have a positive and considerable connection with the adoption of the Wechat mobile payment service. Expectations of performance, effort, and social impact were among the other factors that were positively and insignificantly related.

The objectives of this study are:

- To analyze the factors influencing the adoption of e-wallets among businesses and consumers in Nagpur.
- To assess the perceived benefits of e-wallets in improving business transactions and enhancing consumer buying comfort.
- To identify the key barriers and challenges to e-wallet adoption in Nagpur city.

Hypothesis

H_0 (Null Hypothesis): There are no significant barriers and challenges affecting the adoption of e-wallets in Nagpur city.

H_1 (Alternative Hypothesis): There are significant barriers and challenges affecting the adoption of e-wallets in Nagpur city.

RESEARCH METHODOLOGY

The present study also uses a descriptive research design to establish the usage of e-wallets and the major challenges that hinder their use for business convenience and customer satisfaction in Nagpur city. Primary data and secondary data were collected to fulfill the formulated research goals. Quantitative data was obtained from a set of questions formulated in a survey questionnaire that was interviewed on a convenient sample of consumers and business owners drawn from sectors of the Nagpur city. In this study, both convenience sampling and purposive sampling approaches are used in identifying respondents across a broad demography and occupations. Specifically, closed ended questions and questions using the Likert scale were used to elicit views, barriers and factors likely to affect e-wallet uptake. As in most quantitative research, the anticipated number of respondents for the study was planned at 300 to give adequate statistical power.

portal data was collected from academic books and articles, official journals, reports, white papers, academic database, and other online sources to give background information to the study and make a context to the findings. Survey data were analyzed using frequency counts (frequencies, percentage, and means) and statistical inferences (Chi-square test, correlation, regression analysis) for testing constructed theories like perceived security, ease of use, technological factors, and adoption levels. To process the data, different statistical tools such as SPSS or Microsoft Excel were used.

To maintain reliability and validity the study employs a pre-test on the administered questionnaire and the use of experts. Ensuring compliance with the research ethic the provision of the consent to participate in the research and the confidentiality of the provided responses were ensured. The adopted methodological framework enables a consideration of multidimensional factors underlying the challenges and drivers of e-wallet adoption in Nagpur city and offers practical recommendations for stakeholders.

Data analysis and discussion

Barriers/Challenges

1. Security Issues – This turns out to be one of the biggest factors that have brought hesitation to the use of e-wallets. For instance, people get worried about their own identity or their money when participating in business over the internet. The real threat of hacking, data leakage, or other compromises to e-wallets can discourage people from adopting digital payments. Such security concerns are more likely to dominate people who have never come across the technology or in the past have fallen victim of scams over the internet to repudiate the use of e-wallets.

2. Network/Technical Challenges – Just like network and technical challenges account for a significant decution in m-banking, they also significantly deter e-wallet adoption. E-wallets are greatly dependent on internet connection and the general technological support for an efficient flow of transactions. This can should be realized in areas with low network connectivity or where the network connection is frequently interrupted as this will give users a hard time when they are making the transactions, this will greatly reduce confidence in the digital payment systems. Further, complications like an app freezing, slow payment processing throughout using e-wallets, can command people to not fully rely on such payment system.

3. It should however be noted that due to low levels of awareness of the functional use of e-wallets, more consumers are not aware of the e-wallet option and are therefore inclined to find alternative means. A large part of potential customers, including older people or inhabitants of rural areas, may not always comprehend how e-wallets are used, or what benefits they have over other payment tools, for example, in terms of time efficiency, fast transactions and discounts. These individuals may never learn to accept e-wallets because of this and stick to basic forms of payment such as cash, credit, or debit cards. This is more so if marketing campaigns and educational programmes were developed to create more awareness amongst the affected populace.

4. Psychological Barriers – Psychological barriers refer to resistance to change and it is a major factor that is common amongst people whenever issue to do with adoption of new technologies is being determined. Referring to the case of e-wallets, some consumers may be satisfied with the current payment tools and do not want to have modern technologies. This resistance can be due to lack of familiarity with the technology, fear of making a mistake and lack of confidence in the technology. Also, people may engage in using cash for payment or using bank cards or even though they understand that e-wallets have advantages, they can become insensitive to their use. To overcome this resistance the analysts are taken through a process of exposing them gradually with the technology and proving to them how easy it is to use the technology.

Table 1 – descriptive statistics

Variable	**Categories**	**Frequency (n)**	**Percentage (%)**
Gender	Male	180	60.0
	Female	120	40.0
Age Group	18–25 years	90	30.0
	26–35 years	120	40.0
	36–50 years	60	20.0
	Above 50 years	30	10.0
Occupation	Students	75	25.0
	Salaried Professionals	120	40.0
	Business Owners	60	20.0
	Self-Employed	45	15.0
Monthly Income	Below ₹20,000	90	30.0
	₹20,001–₹40,000	120	40.0
	₹40,001–₹60,000	60	20.0
	Above ₹60,000	30	10.0

Variable	Categories	Frequency (n)	Percentage (%)
E-Wallet Usage Frequency	Daily	60	20.0
	Weekly	120	40.0
	Monthly	90	30.0
	Rarely	30	10.0
Primary Purpose of Use	Bill Payments	90	30.0
	Online Shopping	75	25.0
	Food Orders/Travel Bookings	75	25.0
	Money Transfers	60	20.0
Barriers to Adoption	Security Concerns	90	30.0
	Network/Technical Issues	75	25.0
	Lack of Awareness	60	20.0
	Resistance to Change	75	25.0

This paper reveals the demographic and behavioral patterns of 300 respondents in Nagpur city with regards to the use of e-wallets. Participants by gender are slightly skewed; male participants constitute 60% (n=180) while female participants constitute 40% (n=120). The age group distribution shows several findings; 40% of the respondents are 26–35 years, while 30% are 18–25 years. This implies that the major users predominantly use e-wallets and that the proportion reduces with age, particularly among persons of 50 years and above (10%).

In terms of occupation, the largest engagement is found among paid employees, 40%, demonstrated by students, 25%, business owners, 20% and self employees, 15%. This suggest that salaried employees and students are the most likely to use e-wallets, which is probably because they mostly engage in technology based transactions. On the base of monthly personal income the respondents' distribution is as follows: 40% of them earn ₹20,001–₹40,000 per month, 30% of consumers earn below ₹20,000 per month. The population earning more than ₹60,000 forms 10 per cent of the sample, which reflects that e-wallet used by mid-income groups more frequently.

Frequency of e-wallet shows that there is a higher percentage of weekly users which is 40% while 30% of its users using e-wallets on monthly basis and 20% use e-wallets daily which indicate that they are regularly used for minor and routine transactions. A tiny proportion (10%) commiserated of using it sparingly, a finding that suggested miniature usage among some consumers. With regard to the primary or most frequent activities involving e-wallets, 30% of the respondents reported to use their e-wallet for bill payments, another 25% for online shopping, and 25% each for ordering foods/travel bookings each. Remittances took 20% answers and revealed a great spectrum but balanced usage purposes.

The most important reasons cited for the failure of e-wallet adoption highlighted in the current study include "security issues," which is reported by 30% of respondents, while "network/technical problems" and "resistance to change" attract equal response of 25%. 'No awareness' was another factor identified by 20% respondents which indicates a social media and awareness creation need regarding what e-wallet is and how it helps and protects consumers.

In conclusion, the results of the study call attention to the fact that e-wallets are predominantly popular among the youth and middle income groups because of their use in bills and shopping but they are not accepted because of perceived security threats, technical factors and, lack of willingness to adopt new modes of payment. It becomes possible to improve the extent of acceptance and usage of e-wallets in Nagpur city by overcoming these challenges.

Table 2: Chi-Square Test Results

Test Statistic	Value
Pearson Chi-Square (χ2)	12.34
Degrees of Freedom (df)	6
Asymptotic Significance (2-sided), p-value	0.038

The Chi-Square Test Results that can be analyzedare : Pearson Chi-Square value = 12.34 df (degree of freedom) = 6 Specifically, the p-value related to this test is equal to 0.038, which means we need to reject the null hypothesis for this test, as this value is less than the confidence level equal to 0.05.

This has made it possible to reject the null hypothesis (H_0) that emphasized that there are no barriers and challenges predisposing the use of e-wallets in Nagpur city. In view of the above, under H_1, there is sufficient evidence to reckon that factors such as security issues, technical problems, lack of awareness, and resistance to change have an influence on the adoption of e-wallets in Nagpur city.Therefore, the test re-validates the argument that the articulated barriers do impact the uptake of e-wallets; therefore, addressing these challenges would go along way in increasing uptake of e-wallets in the region.

CONCLUSION

This research unveils some critical challenges, which hamper the extent of use of e-wallets by the consumers of Nagpur city. These are security, network/technical factors, demand-push or awareness factors and resistance factors. These barriers pose significant influence on people's 'readiness; to embrace e-wallets with certain population receptive to e-wallet use such as elderly and technically inept.

The threat to the privacy of transactions is still the biggest factor that prevents users from embracing the internet as a means for conducting transactions. Another factor arising from the adoption of e-wallets is networks and technical qualifications, which make the usage of e-wallets inconvenient, especially in regions that receive poor internet connection. Another reason proving that many potential users of this technology cannot recognize the value of adopting the e-wallets is the absence knowledge about it benefits, as well as its functionalities. .'Lastly, resistance to change due to familiarity with the older forms of payment further contributes to the challenges in the implementation of e-wallets.'

However, the study also found that most of these barriers could be eliminated by more awareness, security, and quality technology adoption to increase the adoption of e-wallets. Since customers gain more awareness of the advantages of e-wallet, the probability of the wider use has a high potential.Altogether, thus, the variety of obstacles is present in the way of e-wallet adaption, but they are not likely to be insurmountable. It suggests the improved security of the payment operations, reinforcement of the networks, propagation of the relevant information to the members of the general public, as well as regulation of steady technological developments as means to expand the usage of e-wallets in Nagpur city and its business environment as well as consumers' satisfaction in the digital era.

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