Analysis of Mobile Wallet Adoption: A Study on Students' Attitudes and Usage Intentions in Dhule District

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Abstract: Mobile wallet adoption in India was on the rise, driven by government initiatives, demonetization, growing smartphone usage, market competition, and increased merchant acceptance. Major players like Paytm, PhonePe, Google Pay, and Amazon Pay were actively competing, offering incentives to users. Integration with UPI and regulatory measures enhanced security and convenience. Mobile wallets were widely used for various transactions. This research studied student attitudes and usage intentions of mobile wallet adoption in Dhule district. To achieve the objectives of the study, a questionnaire with 09 statements related to attitudes and usage intentions was used. The study's sample comprised students from the Dhule district located in the North Maharashtra region. The sample consisted of 100 students who have used mobile wallets for transactions. when it comes to attitudes, there are no significant gender differences in beliefs about the smart and useful aspects of mobile payment apps or their advantages in various transaction domains. However, gender does play a role in perceptions of convenience, trendiness, and excitement, with males generally holding more positive views in these areas compared to females. egarding usage intentions, there are no significant gender disparities in the desire to conduct transactions using a mobile wallet in the near future or in the likelihood to use a smartphone for point-of-sale payments. However, gender does come into play when considering the intention to frequently use mobile wallets and the intention to recommend them to others, with males showing stronger intentions in both of these aspects.

Keywords: Mobile Wallet Adoption, Attitudes, Usage Intentions, Students

I. INTRODUCTION

Mobile wallets have witnessed significant adoption and transformation in the Indian financial landscape over the past decade. With a surge in smartphone penetration, government initiatives, and the push for digital payments, India has become a fertile ground for mobile wallet providers. Mobile wallets are digital payment systems that allow users to store and transfer money using their smartphones. They can be used to make online and offline payments, as well as to pay bills and transfer money to other people. Mobile wallets have become increasingly popular in India in recent years, as the country has rapidly transitioned to a digital economy.

(Sharma & Goyal, 2018) The introduction of mobile wallets in India can be traced back to the early 2010s with the emergence of players like Paytm, which initially focused on mobile recharges and bill payments. Subsequently, digital wallet providers like PhonePe and Google Pay (Tez) entered the market, diversifying the use cases and driving adoption.

Several factors have driven the adoption of mobile wallets in India. The government's Digital India initiative **(Government of India, 2015)** aimed at boosting digital payments has played a pivotal role. Additionally, the demonetization policy in 2016 accelerated the shift towards digital transactions **(Reserve Bank of India, 2016)**. Rising smartphone penetration, especially in rural areas, has made mobile wallets accessible to a broader population **(Assocham & EY, 2019)**.

Intense competition among mobile wallet providers has led to continuous innovation. Companies like Paytm and PhonePe offer cashback incentives and discounts **(Economic Times, 2019)**, while Google Pay introduced features like Tez Shots for entertainment and engagement **(Google India, 2019)**.

Mobile wallets have played a crucial role in advancing financial inclusion by providing banking services to the unbanked and underbanked populations **(Nandan Nilekani, 2019)**. With the integration of the Unified Payments Interface (UPI), mobile wallets have become even more ubiquitous, offering seamless

interoperability with bank accounts **(National Payments Corporation of India, 2016)**. The future prospects of mobile wallets in India appear promising, with continued growth expected in both urban and rural areas.

II. REVIEW OF LITERATURE

One of the primary factors influencing mobile wallet adoption among students is convenience **(Chin & Chua, 2018)**. Mobile wallets offer a seamless and efficient way to make payments, reducing the need to carry physical cash or cards. This convenience aligns with the fast-paced lifestyles of students, making mobile wallets an attractive option **(Liebana-Cabanillas et al., 2017).**

Trust and security concerns play a significant role in shaping students' attitudes toward mobile wallets **(Lu et al., 2019)**. Students are more likely to adopt mobile wallets when they perceive them as secure platforms for financial transactions. The presence of security features and trust-building initiatives by mobile wallet providers can positively impact adoption **(Tan et al., 2018)**.

Peer influence and social norms within student communities have been identified as influential factors **(Yunos et al., 2017)**. Students are more likely to adopt mobile wallets if their peers and social circles are also using these technologies. Positive word-of-mouth and social endorsements can lead to increased adoption intentions **(Lim et al., 2019).**

The perceived cost associated with using mobile wallets can affect students' intentions. If students perceive mobile wallet usage as cost-effective or if they are offered incentives such as cashback rewards, discounts, or loyalty points **(Wang et al., 2020)**, their adoption intentions are likely to increase.

Students' technological readiness and familiarity with smartphones and apps can significantly impact their willingness to adopt mobile wallets **(Choi et al., 2016)**. Students who are more technologically savvy may embrace mobile wallets more readily.

(Bharati and Sharma, 2018) highlights the importance of perceived trust and security in influencing mobile wallet adoption among students in India. Students are more likely to adopt mobile wallets when they perceive them as secure platforms for financial transactions.

A study by **(Sharma and Kumar, 2019)** conducted in Indian universities found that peer influence and social endorsements play a significant role in shaping students' intentions to adopt mobile wallets. Positive word-of-mouth within the Indian student population can lead to increased adoption intentions.

Indian research by **(Gupta et al., 2018)** suggests that students with higher levels of technological readiness are more likely to embrace mobile wallets, particularly in the context of Indian universities where smartphone usage is prevalent..

III. `RESEARCH DESIGN AND METHODOLOGY

For the study, the following objective was formulated

To study student attitudes and usage intentions of mobile wallets in Dhule district.

Hypothesis:

The for the study hypotheses were

H0: There is no genderwise difference in the attitudes of students towards mobile wallets.
H1: There is a genderwise difference in the attitudes of students towards mobile wallets.

H0: There is no genderwise difference in the usage intentions of students towards mobile wallets.
H1: There is a genderwise difference in the usage intentions of students towards mobile wallets.

Data collection and research instrument

The study's sample comprised students from the Dhule district located in the North Maharashtra region. The sample consisted of 100 students who have used mobile wallets for transactions. The student respondents were presented with a list of eight statements measuring attitude and usage intentions ov mobile wallets. The statements measured on a 7-point scale. (1-Strongly Disagree, 2- Disagree, 3- Somewhat disagree 4- Neither agree or disagree, 5-Somewhat agree 6- Agree, 7- Strongly Agree). A list of these statements is given below.

Table-1 Statements measuring attitude and usage intentions

Sr No	Variable	Statements
1	Attitude	I believe mobile payment app is a smart and useful technology
2	Attitude	I believe Mobile payment app is advantageous in every domain of transactions
3	Attitude	I believe Mobile payment app provides convenience and it is very trendy
4	Attitude	Use of mobile payment app is really exciting experience
5	Intention	I would like to do transactions using mobile wallet in the near future
6	Intention	It is very likely that I will use my smartphone to pay at the point-of-sale
7	Intention	I will frequently use Mobile Wallet in future
8	Intention	I intend to recommend others to use Mobile Wallet

IV. DATA ANALYSIS

Data Analysis and Inference

Reliability analysis was carried out on the statements measuring attitude and usage intentions.

Table-2 Reliability Statistics

Reliability Statistics	
Cronbach's Alpha	N of Items
0.903	08

Cronbach's alpha showed the questionnaire to reach acceptable reliability, $\alpha = 0.903$. Thus questionnaire found to be reliable.

The hypotheses was tested using the Independent Samples t-test, done separately for each variable.

H1: There is a genderwise difference in the attitudes of students towards mobile wallets.

Table-3 Group Statistics- Independent Samples t-test (attitude)

Group Statistics- Independent Samples t-test				
		N	Mean	Sig. (2-tailed)
I believe mobile payment app is a smart and useful technology	Male	47	6.54	0.000
	Female	53	5.37	
I believe Mobile payment app is advantageous in every domain of transactions	Male	47	5.55	0.000
	Female	53	5.83	
I believe Mobile payment app provides convenience and it is very trendy	Male	47	6.54	0.076
	Female	53	6.37	
Use of mobile payment app is really exciting experience	Male	47	5.54	0.082
	Female	53	5.79	

Interpretation

I believe mobile payment app is a smart and useful technology:

$p = 0.00$ (Significant at $p < 0.05$). There is a statistically significant difference in beliefs between males and females regarding whether mobile payment apps are considered smart and useful.

I believe Mobile payment app is advantageous in every domain of transactions:

$p = 0.00$ (Significant at $p < 0.05$).There is a statistically significant difference in beliefs between males and females regarding the advantages of mobile payment apps in all domains of transactions.

I believe Mobile payment app provides convenience and it is very trendy:

$p = 0.076$ (Not significant at $p < 0.05$). There is no statistically significant difference between males and females in their beliefs about the convenience and trendiness of mobile payment apps.

Use of mobile payment app is a really exciting experience:
$p = 0.082$ (Not significant at $p < 0.05$). There is no statistically significant difference between males and females in their beliefs about the excitement of using mobile payment apps.

H1: There is a genderwise difference in the usage intentions of students towards mobile wallets.

Table-2 Group Statistics- Independent Samples t-test (usage intentions)

Group Statistics- Independent Samples t-test				
	Gender	N	Mean	Sig. (2-tailed)
I would like to do transactions using mobile wallet in the near future	Male	47	5.52	0.0633
	Female	53	5.79	
It is very likely that I will use my smartphone to pay at the point-of-sale	Male	47	6.51	0.0896
	Female	53	6.33	
I will frequently use Mobile Wallet in future	Male	47	6.51	0.000
	Female	53	5.33	
I intend to recommend others to use Mobile Wallet	Male	47	6.51	0.000
	Female	53	5.76	

Interpretation

I would like to do transactions using mobile wallet in the near future:
Male Mean: 5.52
Female Mean: 5.79
p-value: 0.0633 (not statistically significant)
There is no statistically significant difference between males and females in their desire to do transactions using a mobile wallet in the near future. Although females have a slightly higher mean score (5.79) compared to males (5.52).

It is very likely that I will use my smartphone to pay at the point-of-sale:
Male Mean: 6.51
Female Mean: 6.33
p-value: 0.0896 (not statistically significant)
There is no statistically significant difference between males and females in their likelihood to use their smartphones to pay at the point-of-sale. While males have a slightly higher mean score (6.51) compared to females (6.33).

I will frequently use Mobile Wallet in the future:
Male Mean: 6.51
Female Mean: 5.33
p-value: < 0.000 ($p < 0.05$)
There is a statistically significant difference between males and females in their intention to frequently use a mobile wallet in the future. Males (6.51) express a significantly stronger intention to use mobile wallets frequently compared to females (5.33).

I intend to recommend others to use Mobile Wallet:
Male Mean: 6.51
Female Mean: 5.76
p-value: < 0.001 ($p < 0.05$)

There is a statistically significant difference between males and females in their intention to recommend others to use mobile wallets. Males (6.51) have a significantly stronger intention to recommend the use of mobile wallets compared to females (5.76).

V. CONCLUSION

In this study, we studied the student attitudes and usage intentions of mobile wallets in Dhule district. To conclude attitude, there are no statistically significant differences between males and females in their beliefs about the smart and useful aspects of mobile payment apps or their advantages in every domain of transactions. However, there are statistically significant differences in the beliefs about the convenience, trendiness, and excitement of using mobile payment apps, with males generally having more positive perceptions in these areas compared to females. To conclude usage intentions, there are no statistically significant gender differences in the desire to do transactions using a mobile wallet in the near future or the likelihood to use a smartphone for point-of-sale payments. However, there are significant gender differences in the intention to frequently use mobile wallets and the intention to recommend others to use them, with males expressing stronger intentions in both cases.

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