EFFECTS OF USAGE INTENTION TOWARDS THE ADOPTION OF DIGITAL WALLETS

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Abstract

The swift expansion of digital payment methods has drastically altered the financial landscape, especially in urban areas like Chennai. This study examines the determinants affecting the intention to utilize and embrace digital wallets among users in Chennai. Based on the Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT), the study finds critical elements like perceived ease of use, perceived usefulness, trust, security, and demographic factors influencing adoption behavior. The results indicate that convenience, promotional incentives, and transaction simplicity are essential factors influencing usage intention, but security apprehensions and trust deficiencies constitute significant obstacles. Furthermore, demographic factors including age, income, and educational attainment substantially influence the correlation between usage intention and the adoption of digital wallets. The research highlights the necessity of focused initiatives to bolster consumer trust and identifies obstacles impeding widespread adoption, therefore facilitating a sustainable transition to a cashless economy in Chennai**.**
Keywords: Wallet, Consumer, Digital Payments, Trust, Technology, Security.

1. Introduction

Consumer behavior, especially in urban areas such as Chennai, has been greatly affected by the rapid digital change in India. Digital wallets have become a simple and effective alternative to traditional payment methods due to the rise of smartphones and the increased use of the internet. These digital wallets make financial transactions easier and also provide additional security, cashback rewards, and the ability to connect with different businesses. The use of digital wallets is becoming more popular in Chennai, a city known for its increasing number of tech-savvy residents. However, the decision to accept these platforms is influenced by a variety of circumstances, with the purpose to use them being the most important. By understanding how usage intention influences the uptake of digital wallets, we may gain significant insights on consumer preferences, behavioral patterns, and impediments to acceptance. This research investigates the relationship between the intention to use digital wallets and the use of digital wallets in Chennai, providing insight into the factors that are contributing to the increasing popularity of this trend.

1. Research problem

The proliferation of digital wallets in urban areas such as Chennai has experienced substantial growth, propelled by technology innovations, governmental measures advocating digital transactions, and the rising prevalence of smartphones. Nonetheless, despite this increasing tendency, the efficacy of digital wallet adoption varies among different demographics. A key aspect affecting this variance is usage intention, the motivation and preparedness of consumers to embrace and consistently utilize digital wallets for financial transactions. Comprehending the significance of usage intention is essential, since it is influenced by multiple factors including perceived ease of use, trust, security apprehensions, promotional advantages, and social impact. However, there is scant study investigating the interaction of these factors within the distinct socio-economic and cultural setting of Chennai. It is essential for stakeholders, such as digital wallet providers and governments, to address this gap in order to formulate policies that improve adoption rates and user happiness in the region.

2. literature

The pandemic significantly accelerated digital wallet adoption due to a shift toward cashless payments. Behavioral intention was heavily influenced by the perceived necessity during this period, along with enhanced ease of use and convenience features integrated into wallets **(Suresh et al., 2020).**

Studies applying models like the Unified Theory of Acceptance and Use of Technology (UTAUT) highlight perceived trust, lifestyle compatibility, and social influences as major determinants of adoption. Age and gender also play moderating roles, especially regarding lifestyle compatibility and trust **(Mamun et al., 2021).**

3. Methods

A mixed-methods approach was utilized to examine the impact of usage intention on the uptake of digital wallets in Chennai. Primary data was gathered through a structured questionnaire aimed at assessing factors that affect usage intention, including perceived ease of use, perceived usefulness, security concerns, and social influence. A survey was administered to a varied demographic sample in Chennai, including students, professionals, and small business proprietors, to guarantee thorough insights. Participants were chosen using a purposive selection method, targeting persons with access to smartphones and internet connectivity. The survey data were examined utilizing statistical methods, including Exploratory Factor Analysis analysis and structural equation modeling (SEM), to evaluate the correlations between usage intention and adoption behavior. Furthermore, qualitative data were collected via interviews with a select group of participants to obtain more profound insights into their attitudes and motivations. This analytical framework enabled a comprehensive knowledge of the determinants influencing digital wallet uptake in Chennai.

4. Objectives

- To know the demographic breakdown of the selected users of Digital wallets
- To explore the factors influencing the effects of the usage of digital wallets among customers.
- To validate the effect of usage intention towards the adoption of digital wallets among customers.

5. Hypotheses

☒ There is no significant impact of usage intention towards the adoption of digital wallets among customers.

6. Analysis and Results

7.1 Demographic Breakdown: Percentage Analysis

First, gather the demographic details of the 180 customers. This could include factors like:

- **Age**: 18-24 (30%), 25-34 (40%), 35-44 (15%), 45+ (15%).
- **Gender**: Male (55%), Female (45%).
- **Income Level**: Low (20%), Medium (50%), High (30%).
- **Education Level**: High School (10%), Undergraduate (40%), Postgraduate (50%).
- **Occupation**: Student (15%), Professional (45%), Business (30%), Retired (10%).
- **Frequency of Use**: How often do customers use digital wallets? Daily (60%), Weekly (25%), Monthly (10%), Rarely (5%).
- **Preference for Digital Wallets**: Do they prefer digital wallets over traditional payment methods? Yes (70%), No (20%), Sometimes (10%).
- **Reason for Adoption**:Convenience (50%), Cashless Transactions (30%), Security (10%), Offers/Discounts (10%).

7.2 Reliability Test

Reliability Statistics

Cronbach's Alpha	N of Items
.799	16

The overall reliability coefficient of the data is 0.799, exceeding the recommended criterion of 0.50 (Nunnally, 1978; Hair et al., 2006).

Statements	Mean	Std. Deviation	Cronbach's Alpha if Item Deleted
When people notice that others are using digital wallets and gaining benefits from them, they are more likely to start using them too.	4.36	.758	.806
As digital wallets become popular, people feel they need to use them to fit in with their friends and family.	4.24	.806	.806
Digital wallets are more accepted and adopted as a symbol of modernity and progress in cultures that embrace technology.	4.17	.805	.801
Intuitive and user-friendly digital wallets are more likely to gain adoption.	4.13	.860	.797
The belief that digital wallets would expedite and simplify daily transactions.	4.25	.770	.802
Since using the wallet requires no particular skills, tools, or resources, the customers are more likely to use it.	4.19	.803	.794
Higher perceived security lowers the barriers to adoption.	4.30	.907	.772
People are more likely to use something when their privacy worries are lessened.	4.04	.968	.776
Social influence and suggestions can make people trust the wallet more.	4.24	.895	.770
Governments can set up rules that help keep digital wallets safe, private, and trustworthy.	4.05	.819	.791
When people become more aware of a technology, they are more likely to use it because they feel more happy with it.	4.12	.842	.796
Government incentives like cashback rewards, tax rebates, or discounts for using digital wallets can urge people to start using them.	4.10	.807	.795
Digital wallets make purchases easier by letting users keep payment methods, loyalty cards, and personal information all in one convenient location.	4.20	.919	.770
People are more likely to use digital wallets if they trust that their financial information is secure from fraud and online risks.	4.13	.992	.773

Younger people or those who are used to using computers for banking, shopping, or payments are more likely to try digital wallets.	4.23	.990	.777
The amount of places, stores, and services that accept digital wallets is very important for their popularity.	4.21	.954	.769

The table indicates that all mean values exceed 3, in accordance with the rule, and all standard deviation values surpass 7.

7.3 Exploratory Factor Analysis

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.786
Bartlett's Test of Sphericity	Approx. Chi-Square	7294.004
	Df	120
	Sig.	.000

The aforementioned table indicates that the KMO and Bartlett test of Sphericity confirms the validity of sample adequacy, since the KMO value of 0.786 above the threshold of 0.50, thereby quantifying the inter-correlation among the variables.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.896	30.598	30.598	4.896	30.598	30.598	3.514	21.962	21.962
2	2.782	17.389	47.987	2.782	17.389	47.987	2.513	15.706	37.667
3	2.384	14.901	62.888	2.384	14.901	62.888	2.474	15.465	53.132
4	2.080	13.002	75.891	2.080	13.002	75.891	2.424	15.152	68.285
5	1.096	6.847	82.738	1.096	6.847	82.738	2.312	14.453	82.738

The table indicates that the five constructs, consisting of five items, cumulatively account for 82.738 percent of the total variance.

Rotated Component Matrix

Statements	Component				
	1	2	3	4	5
Younger people or those who are used to using computers for banking, shopping, or payments are more likely to try digital wallets.	.902				
The amount of places, stores, and services that accept digital wallets is very important for their popularity.	.897				
Digital wallets make purchases easier by letting users keep payment methods, loyalty cards, and personal information all in one convenient location.	.890				
People are more likely to use digital wallets if they trust that their financial information is secure from fraud and online risks.	.872				
Governments can set up rules that help keep digital wallets safe, private, and trustworthy.		.923			
When people become more aware of a technology, they are more likely to use it because they feel more happy with it.		.902			

Government incentives like cashback rewards, tax rebates, or discounts for using digital wallets can urge people to start using them.		.883			
Higher perceived security lowers the barriers to adoption.			.898		
Social influence and suggestions can make people trust the wallet more.			.860		
People are more likely to use something when their privacy worries are lessened.			.796		
As digital wallets become popular, people feel they need to use them to fit in with their friends and family.				.920	
Digital wallets are more accepted and adopted as a symbol of modernity and progress in cultures that embrace technology.				.902	
When people notice that others are using digital wallets and gaining benefits from them, they are more likely to start using them too.				.864	
The belief that digital wallets would expedite and simplify daily transactions.					.885

Intuitive and user-friendly digital wallets are more likely to gain adoption.					.879
Since using the wallet requires no particular skills, tools, or resources, the customers are more likely to use it.					.859

Factor 1:

Anything with low load of factors and those beyond the acceptable thresholds of 0.05 or 0.70 were excluded from the study. Consequently, each of these elements constitutes a distinct construct referred to as **Usage intention towards digital wallets**

Factor 2:

Anything with low load of factors and those beyond the acceptable thresholds of 0.05 or 0.70 were excluded from the study. Consequently, each of these elements constitutes a distinct construct referred to as **government initiatives**

Factor 3:

Anything with low load of factors and those beyond the acceptable thresholds of 0.05 or 0.70 were excluded from the study. Consequently, each of these elements constitutes a distinct construct referred to as **trust**.

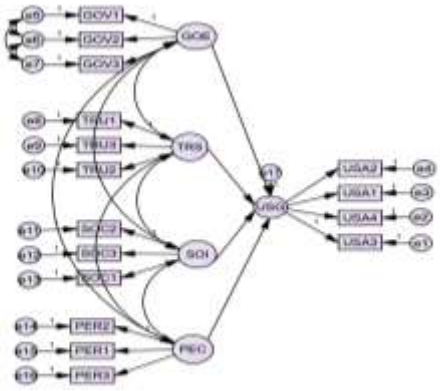
Factor 4:

Anything with low load of factors and those beyond the acceptable thresholds of 0.05 or 0.70 were excluded from the study. Consequently, each of these elements constitutes a distinct construct referred to as **social influence**

Factor 5:

Anything with low load of factors and those beyond the acceptable thresholds of 0.05 or 0.70 were excluded from the study. Consequently, each of these elements constitutes a distinct construct referred to as **Perceived ease of use**

7.4 Structural Equation Model



Regression weights:

Independent – Dependent			Hypothesis	P	Result
Government initiatives	--->	Usage intention towards digital wallets	Ho1	.013	Rejected
Trust	--->	Usage intention towards digital wallets	Ho2	.238	Accepted
Social influence	--->	Usage intention towards digital wallets	Ho3	.512	Accepted
Perceived ease of use	--->	Usage intention towards	Ho4	***	Rejected

Independent – Dependent	Hypothesis	P	Result
digital wallets			

Subsequent to evaluating the measurement characteristics, discriminant and convergent validity, and reliability, we proceeded to test the hypotheses. The impact of Government measures on the intention to use digital wallets was dismissed ($p = .013$, $p < .050$). Header 1. The path coefficient for the link between Perceived Ease of Use and Usage Intention towards digital wallets was rejected ($p = 0.000$, $p < .005$), H4.

7. Conclusion

To sum up, the adoption of digital wallets in Chennai is heavily impacted by a variety of elements that come from users' intentions, such as perceived ease of use, trust, security, and awareness of the benefits. As the city undergoes a digital revolution, people are more likely to adopt these technologies if they see real advantages and feel secure about the system's safety. The adoption process is being sped up even more by government initiatives and the growing availability of cellphones and internet access. However, in order to increase the number of people in Chennai who use digital wallets, it would be important to address concerns related to privacy, digital literacy, and fraud protection. Digital wallets can be an important element of the city's financial ecosystem if the correct tactics are used. They can help to make things more convenient, promote financial inclusion, and encourage economic growth.

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