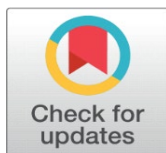
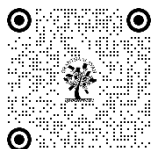


# CONSUMERS' PERCEPTION TOWARDS E-WALLETS IN HARYANA USING PLS-SEM APPROACH

Jaideep <sup>1</sup>, Dr. Nitu Nimbrain <sup>2</sup>

<sup>1</sup> Research Scholar, Institute of Management Studies and Research, Maharshi Dayanand University, Rohtak

<sup>2</sup> Assistant Professor, Institute of Management Studies and Research, Maharshi Dayanand University, Rohtak



## Corresponding Author

Jaideep, [jaideepimsar1@gmail.com](mailto:jaideepimsar1@gmail.com)

## DOI

[10.29121/shodhkosh.v4.i1.2023.2087](https://doi.org/10.29121/shodhkosh.v4.i1.2023.2087)

**Funding:** This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

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## 1. INTRODUCTION

In this technological age, the smartphone is an indispensable component of human existence. People utilize digital payments, e-wallets, e-cash, e-payments, and electronic payment systems through the smartphone. E-payment offers a device or instrument that facilitates consumers' online payments for internet-delivered products and services (Subramanian et al., 2019). The progress of information and communication technology (ICT) has had a favourable impact on the life span of an individual. According to Slozko and Pelo (2015) technological progress has a significant impact and provides numerous benefits in financial, operational, and economic expenditures. Furthermore, the progression of payment methods has begun with the barter system and progressed with the advancement in technology through the following stages: money, cheques, credit cards and online banking. Presently, the focus of settlement processes is shifting towards electronic wallets. In the current era of technological advancements, a paradigm shift has occurred in the global business landscape, resulting in an unwavering transition from cash-based transactions to electronic payment systems (Al-Laham et al., 2009). Moreover, the expansion of international network usage has played

## ABSTRACT

Electronic wallets refer to an electronic system that allows an individual to make financial transactions digitally without using cash. The present study conducted in Haryana State that provides the factors that form Consumers' Perception towards E-Wallets Services. The study used Partial Least Square- Structural Equation Modeling using SmartPLS-4 software and collected the primary data through a structured questionnaire from 1000 respondents from six administrative divisions of Haryana covering all 22 districts with the help of convenient sampling method. Variables have been measured using 5-point Likert scale. The out of the study is a conceptual model of Consumers' Perception towards E-Wallets Services in Haryana. Finding of the study suggests that consumers' form a positive perception when they find an e-wallet service simple, reliable, secure and efficient which uplift their social status.

**Keywords:** Consumers' Perception, E-Wallets Services, Structural Equation Modeling, Haryana, India

a role in facilitating the operations of global e-commerce enterprises (Fernandes, 2013). These methods include funds transfers, business transactions processes for payment on business consumptions, prepaid devices, and electronic wallets. The concept of e-wallets has been in existence for several years and has continuously evolved over time. An abundance of mobile payment applications have been developed to facilitate consumer settlement, currency transfers, and financial management (Thakur and Srivastava 2014, Dahlberg et al. 2008, Tam and Oliveira 2017). Further, Malaysian Central Bank has authorized over thirty electronic wallet licenses to far. Twenty percent of the transactions, however, are conducted via credit cards and online banking; the remaining 80% are conducted in currency. It demonstrates that Malaysians have yet to adopt electronic wallets. There is a scarcity of research in the literature regarding the intention of Malaysian youth to utilize electronic wallets. Consequently, the objective of this study is to investigate the impact of perceived utility, perceived simplicity of use, perceived risk, and reward on the intention to utilize electronic wallets. The study primarily concentrates on Malaysia due to the country's restricted adoption of electronic wallets. The replacement of conventional paper money with digital payment ecosystems, such as mobile payment (m-payment), has occurred gradually due to the integration of wireless communications, smartphone, and banking systems (Sharma et al., 2018). The mobile electronic wallet (e-wallet) is a crucial element of the digital payment ecosystem and falls under the category of m-payment. On account of the rapid global proliferation of smartphones, it is anticipated that the mobile e-wallet market will experience a substantial increase in value. The market for electronic wallet transactions is projected to reach \$6.4 billion by 2022 and is expected to grow to \$9.4 billion by 2025, according to Statista (2021). E-wallets are a convenient digital means of moving funds and making payments to merchants and people using a smartphone. They operate by holding funds from a bank account, which may be accessed by internet banking systems or debit or credit cards (Bagla and Sancheti, 2018). E-wallets are a convenient digital means of moving funds and making payments to merchants and people using a smartphone. They function by retaining funds from a bank account, which can be accessed through online banking systems or debit or credit cards (Razer, 2019). Numerous financial institutions and non-financial organizations that vie to offer their customers the utmost convenience in financial transactions support this variety of electronic wallet (Bagla and Sancheti, 2018). As an effective preventative measure against the spread of the corona virus, the digitization of banking and financial services has been crucial during the pandemic. Alternative payment methods, such as e-wallets, were favored by consumers in place of conventional ones as a result of the pandemic (Daragmeh et al., 2021). However, according to Ismail (2021), the degree of use consistency in electronic wallets is still insufficient and unsatisfactory. Prior study indicates that certain users are reluctant to endorse or maintain usage of the e-wallet program. The participants' inclination to use e-wallet applications was affected by the unfavorable emotion they experienced towards such applications (Yong et al., 2018). Most research on digital payments focusses on factors that influence consumers' desire to keep using mobile payment systems (m-payments), both before and after adopting them (Gupta et al., 2020), security (Wu et al., 2019), user satisfaction (Liao et al., 2007) and factors influence the development of trust (Shao et al., 2019). Nevertheless, limited attention has been devoted to investigating the determinants of consumer intent, particularly in the context of the pandemic COVID-19 in 2020 (Daragmeh et al., 2021). Regarding the relationship between a few factors—namely satisfaction, perceived value, perceived usefulness, perceived ease of use, disconfirmation, subjective norm, and perceived behavioral control—and the intention of consumers to continue using e-wallets, empirical evidence is still lacking (Wang et al., 2019; Alalwan, 2020; Gupta et al., 2020).

## 2. REVIEW OF LITERATURE

Author(s)	Methodology	Findings	Suggestions
Shen et al. (2010)	SEM	The actual findings substantiated the majority of hypothesized correlations among the components	It is recommended that future study focusses on investigating the preconditions and product settings
Phonthanukitithaworn et al. (2015)	SEM	Consumers' adoption factors—compatibility, subjective norm, perceived trust, and perceived cost	Further study may consider improving measurement reliability by employing additional methods
Shao et al. (2018)	PLS-SEM	The findings suggest that security is the primary factor influencing customers' trust, with platform reputation, mobility, and customization being secondary factors	Future studies can be conducted in different nations to examine the generalizability of our proposed theoretical model

Sharma et al. (2018)	Interpretive Structural Modelling (ISM)	“Anxiety” towards new technology, lack of “new technology skills” and “complexity of new technology” are the key inhibitors to mobile wallet acceptance	Benchmarking study for users, banking organizations, and vendors in Oman or the GCC region
Arora and Yadav (2018)	ANOVA, Chi-Square Test, and Factor Analysis	Significant difference in reasons for customer satisfaction among different age groups	Policy Makers should focus on implementation of security measures
Nandhini and Girija (2019)	Chi-Square Test, Percentage Analysis, T-test, and Rank Analysis	The customer perceptions about the e-wallets are good	Government should address network connectivity and security issues
Karim et al. (2020)	Extended TAM Model, and PLS-SEM	The variables of perceived usefulness, perceived ease of use, and privacy and security exhibit a positive and significant relationship with behavioral intention	Service providers possess a broader understanding of the practicality and advantages of using e-wallets
Ariffin et al. (2021)	SPSS/PLS-SEM	Technology Acceptance Model and Theory of Planned Behavior as well as user satisfaction, have an impact on the intention to use	Assist service companies in comprehending user behavior and devising effective marketing tactics
Pertiwi et al. (2021)	Partial Least Square (PLS) Analysis	The attitude is influenced by the perceived ease of use and perceived usefulness	E-wallet providers should focus on enhancing the ease of use and usefulness of their applications
Undale et al. (2021)	BCA Bootstrap Method	female users are more concerned about eWallet security than male users	Future studies should also use multi-method approach of Analysis
Malik and Annuar (2021)	TAM Model	“Perceived usefulness”, “perceived ease of use”, and “reward” directly influence the intention to use e-wallet	In future research, researchers have the opportunity to expand the study by assessing other variables

Source: The Authors

### 3. RESEARCH GAP

E-wallets have made financial transactions easier as it offer convenience and efficiency. Numerous studies have examined consumers’ perception regarding E-wallet in various regions in India but there are limited studies found specifically focused on Haryana State. Also this study needed to be conducted because Haryana is a state with diverse socio-economic landscape, presents a unique context for studying consumers’ perception. The role of cultural attitudes and trust in technology adoption within the context of Haryana has been under-researched.

### 4. METHODOLOGY

The study used Partial Least Square-Structural Equation Modelling using SmartPLS-4 software and the primary data collected from the e-wallet users through a well-designed and well-structured questionnaire from 1000 respondents residing in six administrative divisions of Haryana State that are Ambala, Rohtak, Gurugram, Hisar, Karnal and Faridabad covering all 22 district using convenient sampling method Haryana State using convenient sampling method. The e-wallet usage purpose variables have been measured using 5-point Likert scale.

## 5. RESULTS AND DISCUSSION

Table 1: KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.951
Bartlett's Test of Sphericity	Approx. Chi-Square	28329.241
	df	210
	Sig.	.000

Source The Authors

**Table 1** provides support to dataset is suitable for factor analysis. The high KMO value indicates a high proportion of common variance, and the significant Bartlett's test result suggests that there are sufficient correlations between variables to proceed with factor analysis. The KMO measure is an index used to examine the appropriateness of factor analysis. The proportion of variance among the variables is assessed by KMO that might be common variance. Value closer to 1 indicates that factor analysis is likely to be useful. A result of 0.951 is seen to be quite high, indicating that the data is good and appropriate for factor analysis. A high chi-square value shows a considerable deviation of the correlation matrix from an identity matrix, suggesting the presence of correlations between the variables. This is the p-value associated with the chi-square statistic. A significance value (p-value) of 0.000 (typically reported as <0.001 in many contexts) indicates that the results are statistically significant, meaning we can reject the null hypothesis that the correlation matrix is an identity matrix. This supports the use of factor analysis on the data. **Table 2** is related to rotated component matrix.

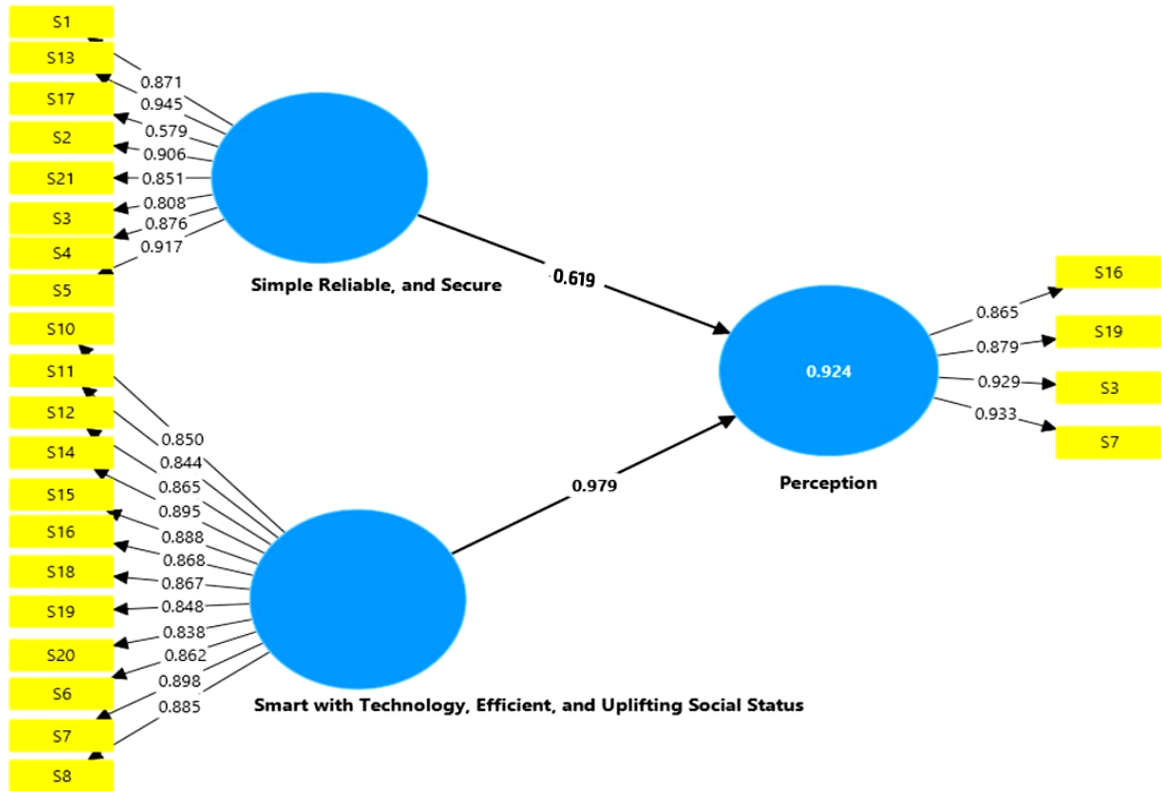
Table 2: Rotated Component Matrix

Sr. No.	Statements	Component	
		1	2
1	"E-wallet services are easy to understand"	.653	.568
2	"After using E-wallet services, banking become easier to me"	.787	
3	"E-wallet services help me to do things better and effectively"	.883	
4	"E-wallet service is user-friendly and easy to use"	.795	
5	"E-wallet services are beneficial for me"	.662	.626
6	"E-wallet services are really attractive"	.726	
7	"I would be able to use all banking products in E-wallet service which I haven't used yet"	.812	
8	"My money is secured in an E-wallet service"	.774	
9	"I trust E-wallet service because my closed ones trust it"		.802
10	"E-wallet service is available in my language"	.723	
11	"E-wallet service is cheap to use"	.772	
12	"App of E-wallet is very attractive and explanatory"	.731	
13	"I feel very comfortable in using E-wallet services"	.690	.623
14	All the services in E-wallet are as good as normal banking	.809	
15	"I am familiar with the technology used in E-wallet services"	.871	
16	"I am familiar with the functioning of the E-wallet services"	.837	
17	"E-wallet doesn't provides all services under one app"		.880
18	"E-wallet services is very fast and reliable"	.741	
19	"It is in the trend and we should follow the trend"	.734	
20	"It is accessible from anywhere and safe to use"	.724	
21	"I believe my personal information is stored in a secure and encrypted database"	.544	.676

Source: The Authors

In **Figure 1**, there are two constructs formed that explains the Perception of E-wallet users. The construct “Simple Reliable, and Secure” with 0.619 value refers to users’ perception of technology attributes, including ease of use, reliability, and security. Second construct “Smart with Technology, Efficient, and Uplifting Social Status” with a value of 0.979 represents the outcomes or benefits associated with using the technology. “Perception” representing how users perceive the technology based on these two constructs.

**Figure 1: E-Wallets Consumers’ Perception**



Source: Authors applied Partial Least Squares Structural Equation Modeling (PLS-SEM) using SmartPLS

## 6. CONCLUSION AND POLICY RECOMMENDATIONS

The study found that e-wallet service providers must take into account the recommendations outlined in the model presented in this study that consumer perception is determined by simple, reliable and secure interface. A user friendly experience gives the advantage to a service when user who are not good at adopting technology. It accommodates users who may not be good at technology. Users can quickly adapt to the system that uplift their social status. An efficient interface fosters trust and encourages users to explore further. Security is the most crucial factor that leads to the determination of consumer perception regarding a particular e-wallet service. In short we can say that e-wallet providers should prioritize user-friendliness, security, and efficiency to develop a positive user perception. By taking consideration of these factors, policy makers can attract a broader consumer base and build trust among them.

## CONFLICT OF INTERESTS

None.

## ACKNOWLEDGMENTS

None.

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