

ARE DIGITAL WALLETS THE NEW CURRENCY?

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India is heading on the path of a major digital revolution. Digitalization of the payment mechanism will be considered as landmark in the era of cashless future economy. The present research aims to empirically examine the adoption patterns of digital wallets by of the respondents. An exploration of customer perception, usage pattern preferences and satisfaction level regarding digital wallets is made based on a study of 52 respondents. It further identifies the barriers and challenges to the adoption of digital wallets. To attain the aforesaid purpose a well structured questionnaire was administered to respondents wherein they were asked various with regards to adoption of digital wallets.

The results indicate that there exists a huge untapped market for digital wallets both in terms of increasing awareness as well as its usage. Time saving and ease of usage were found to be the main reasons for using wallets. However, safety of money transacted remained their major concern. Security issues in terms of fear of cash loss and lack of usability for international transactions are the prime barriers to its adoption. The study makes a valuable contribution to research in the area of finance, by exploring digital payment systems in India, an emerging concept.

Keywords: Digital wallets, currency, consumer perception, usage pattern, barriers.

INTRODUCTION

Lately, India has been experiencing exponential growth in the area of digital payment. With ever-increasing internet and mobile penetration, the country is all set to witness a massive surge in the adoption of digital payments in the coming years. Furthermore, flagship government initiative such as Digital India will act as key catalysts and enabler of this transformation.

Mobile payments have been in use for many years and have gained ground (Dahlberg, et. al., 2008). The mobile wallet is a new application of mobile payment that has functionality to supplant a conventional wallet and more. Mobile payments are a top investment priority for banks. In fact, the world's biggest banks continue to focus most of their announced IT initiatives on mobile financial services (including payments) and online banking. Out of a world population of 7 billion, over 5 billion or 70% have a mobile phone, whereas only 2 billion or 30% have a bank account. In India: on a population of 1.2 billion over 800 million have a mobile phone and only 250 million have a bank account. Consumers are increasingly using their mobile phones to make payments. The market for payments made through digital medium has grown at a compounded annual growth rate (CAGR) of 10% between 2010 and 2013. The four metros—Delhi, Mumbai, Kolkata and Chennai—contributed about 60% of the total digital payment gateway market size, followed by Bangalore, Hyderabad, Ahmedabad, Pune which together contributed 25% in 2013.

At present, mobile payments form a minuscule part of the overall digital payments industry in India. However, the contribution from phones and tablets is expected to increase to 30 per cent by 2020. Mobile payments in India are estimated to grow from \$86 million in 2011 to \$1.15 billion in 2016, with a compounded annual growth rate (CAGR) of 68 per cent, according to estimates. The CEO of Apple, Tim Cook, summarized the potential of digital wallets as: "*The vision is to replace the wallet. And the starting point is payments.*"

Besides payment, people can also store receipts, coupons, business cards, bills...in their smartphones. When smartphones can function as leather wallets, it is called "Digital Wallet" or widely known as "Mobile Wallet" (Doan, 2014). The m-wallet segment includes transfer of money, services related to banking transactions, value-added services such as shopping, ticketing, recharging, and bill payments. In this segment, the highest, 38 per cent market share is captured by money transfer businesses, followed by recharge and bill payments, and utility areas by 30 per cent and 12 per cent, respectively. The

relative advantage which digital wallets offers are convenience, security and affordability over other payment methods specially while transferring money (Wamuyu, 2014).

A digital wallet is a virtual storage system that can contain money and a digital certificate of your identity. It is a software application, usually for a smartphone that serves as an electronic version of a physical wallet or refers to an electronic device that allows an individual to make electronic commerce transactions. This can include purchasing items on-line with a computer or using a smartphone to purchase something at a store. Increasingly, digital wallets are being made not just for basic financial transactions but to also authenticate the holder's credentials. For example, a digital-wallet could potentially verify the age of the buyer to the store while purchasing items. It is useful to approach the term "digital wallet" not as a singular technology but as three major parts: the system (the electronic infrastructure) and the application (the software that operates on top) and the device (the individual portion). An individual's bank account can also be linked to the digital wallet.

It is a system that securely stores user's Payment information and passwords for numerous payment methods and websites. By using a digital wallet, users can complete purchases easily and quickly with near-field communications technology. They can also create stronger passwords without worrying about whether they will be able to remember them later. Digital wallets can be used in conjunction with mobile payments systems that allow customers to pay for purchases with their smartphones.

Certain sources are speculating that these smartphone "digital wallets" will eventually replace physical wallets. The system has already gained popularity in Japan, where digital wallets are known as OSAIFU-KETAI or "wallet mobiles.

As mobile commerce grew in the first half of this decade, several payment gateways started operations in India, which could sign up with specific merchants to reduce the pain associated with individual two factor transactions. There was a movement from Closed Wallets (establishment specific) to Semi Closed Wallets (Group of contracted establishments using the wallet) in the last few years given the mushrooming of digital commerce and the blanket implementation of two factor authentication requirements.

Now, the Reserve Bank of India is mulling retiring the requirement for two factor authentication on cards transactions in India. This potential change will apply to both debit and credit cards, used on point of sale (POS), card not present transactions (CNP) as well as Internet based transactions. This change will potentially have a payment value threshold of 3000-5000 as per various media reports. Given that the low value transactions still make a bulk of this market, this move by RBI may seemingly be a death knell for Wallets - given the ease of single click commerce going forward.

Table 1: Top 5 Digital Wallets in India

S. No.	Wallet Name	Key Features
1	Paytm	Owned By- One97Communications Registered Users- 80 million Daily Transactions- 2 million Funding- \$ 200 million Orders Per Month- 60 million App Download- 30 million Net Banking Options- More than 40
2	Mobikwik	Users- Over 50 million Merchants- Over 2500 Applied for Bank Payment License Daily Views- Over 220000 Funding- \$5 million
3	PayUmoney	Owner Company- Naspers Group Payment Options- Over 250 Accepted At- Over 65000 websites & businesses Operate in over 16 countries Merchants- Over 4000 Permits Transactions- Online/Offline
4	Citrus	Users- Over 3 million Transactions Per Month- 1.5 million User Base- 800 million Funding- \$ 7.3 million

		Clients- Over 1000	
5	Oxigen	Transactions Per Month- Over 35 million Instant Money Transfers on IMPS Allows Transactions on Social Networking platforms Payment Solutions Provider in over 130000 outlets	Money Transfers to- Over 60 banks

Source: Appknox

REVIEW OF LITERATURE

With the advent of technology, consumers have an enormous array of payment modes (Pulina, 2011; Soman, 2001, 2003; Srivastava & Raghubir, 2008;) which facilitates payment for transactions by being more convenient, acceptable and accessible (Soman, 2001). Prior studies suggest that there is a general consumer interest towards using mobile payment applications (Dewan & Chen, 2005; Kreyer et al., 2003). The initial adoption of mobile payments has not, however, been as rapid or widespread as expected (BIS, 2004).

Different factors have come into play which affect the adoption of digital wallets as a payment medium such as trust, expressiveness and perceived ease of use, playing a crucial role in facilitating adoption of digital payment solutions (Padashetty & SV,2013). Mallat (2007) presented a qualitative study on consumer adoption of mobile payments in Finland and found that the relative advantage of mobile payments were different from that specified in adoption theories and included independence of time and place, availability, possibilities for remote payments, and queue avoidance. Furthermore, the adoption of mobile payments was found to be dynamic, depending on certain situational factors such as a lack of other payment methods or urgency. Several other barriers to adoption were also identified, including premium pricing, complexity, a lack of critical mass, and perceived risks. The findings provided a foundation for an enhanced theory on mobile payment adoption and for the practical development of mobile payment services. During the same period Dahlberg et. al., (2007) proposed a framework of four contingency and five competitive force factors of mobile payment research. The study examined the two most important factors in contemporary mobile payments research namely, mobile payment technologies and consumer perspective of mobile payments. Braga & Mazzon (2013) proposed a comprehensive 'Payment Mode Influencing Consumer Purchase Model', considering the temporal separation, temporal orientation, selfcontrol and pain of payment constructs, and adding the digital wallet as a new payment mode.

Digital wallet payments bring extra convenience to shoppers by offering flexible payment additions and accelerating exchanges (Liu & Zhuo, 2012). Shin (2009) tested a comprehensive model of consumer acceptance in the context of mobile payment. It used the unified theory of acceptance and use of technology (UTAUT) model with constructs of security, trust, social influence, and self-efficacy. Structural equation modeling was used to construct a predictive model of attitudes toward the mobile wallet. Individuals' responses to questions about attitude and intention to adopt/use a mobile wallet were collected and analyzed with various factors modified from usefulness and ease of use are key antecedents UTAUT. While the model confirmed the classical role of technology acceptance factors (i.e., perceived to users' attitude), the results also showed that users' attitudes and intentions are influenced by perceived security and trust. In the extended model, the moderating effects of demographics on the relations among the variables were found to be significant. According to a report by Mc Kinsey & Co. (2014) the US consumers enthusiasm for certain benefits enabled by mobile payments remained high, especially around easier usage of coupons and loyalty points. But excitement is moderating as delivery of these benefits remains fragmented across many providers, with none of them commonly accepted by a broad sets of merchants. In fact, the results indicated that consumers were less excited about many of the various value propositions enabled by mobile payments (including "leaving their wallet at home"), and they were more skeptical about the broad promises of mobile wallets than they were one year ago. More recently, Rathore (2016) identified convenience in buying products online as the major factor in consumer adoption of digital wallet. Taheam et al., (2016) suggested that controllability & security, societal influence &

usefulness and need for performance enhancement as the factors which drive the usage of digital wallet among youth in the state of Punjab.

Security and privacy were the major concerns for the consumers which affect the adoption of digital payment solutions (Dahlberg & Mallat, 2002). Later, Bamasak (2011) showed that there is a bright future for m-payment in Saudi Arabia as majority of respondents showed their willingness to participate in such an activity. However, security of mobile payment transactions and the unauthorised use of mobile phones to make a payment were found to be of great concerns to the mobile phone users. Another study by Doan (2014) illustrated the adoption of mobile wallet among consumers in Finland as only at the beginning stages of the Innovation-Decision Process: Knowledge Stage and Persuasion Stage (Rogers, 1983). Moreover, it seemed to be a challenge in making them move to the Decision Stage where they actually start using mobile wallet. However, the good news is that consumers in Finland express positive attitudes toward mobile wallet. Yet, security issues in transaction and privacy were the most concerned factors among the users.

OBJECTIVES OF THE STUDY

Considering the emerging scope of digital revolution in India, the need for current study was felt to evaluate the adoption and performance of digital wallets in the country. On the basis of the need of the study, following objectives had been derived to set the focus of the study:

1. To examine the customer awareness and perception towards digital wallets.
2. To identify the customer preferences and usage pattern with regards to digital wallets
3. To explore the reasons for adoption of digital wallets and customer satisfaction regarding the same.
4. To study the challenges faced and barriers in adoption of digital wallets.

The paper contributes to existing mobile commerce and adoption research by presenting a detailed evaluation of the performance of digital wallet through the usage parameters (usage, load of wallet and preference wallets) and expenditure analysis (financial transaction, business and shopping expenditure) and the satisfaction level of the respondents in the areas of Adampur and Jalandhar.

Demographics also play an important role in adoption of any new technology. In India consumers younger than 35 years of age are nearly double to download a mobile app in their mobile phone in comparison to over 50 years of age. More than half of those consumers, use digital wallets at least once in a week, most commonly for exploiting special offers such as coupons, discounts etc.(Digital Research Inc., 2013). Therefore, it was important to examine the adoption and performance of digital wallets in the light of the demographics of the respondents.

RESEARCH METHODOLOGY

The current study is based on primary data collected from 52 respondents from the regions of Jalandhar and Adampur. The respondents for the study comprised of students, bankers, retailer business men and service men selected on the basis of convenience. A well structured questionnaire was designed to collect the information from the respondents. The questionnaire comprised of three main sections covering the awareness and perception, usage and factors encouraging and discouraging the adoption of digital wallets. Further, a qualitative analysis was conducted to achieve the predetermined objectives.

RESULTS AND DISCUSSION

Demographic Profile of Respondents

Table 1 depicts the demographic profile of the respondents. The respondents are classified on the basis of age, gender, nature of work, educational qualifications, marital status and monthly income.

Table 1. Demographic Profile of Respondents

Demographic Factors	Number of Respondents	Percentage of Respondents
Age		
18-25	32	61

25-35	12	23
35-50	6	12
Above 50	2	4
Total	52	100
Gender		
Male	30	58
Female	22	42
Total	52	100
Nature of Work		
Student	28	54
Service man	8	15
Professional	4	8
Business man	12	23
Total	52	100
Educational Qualifications		
B.A.	10	19
B.com	10	19
MBA	18	35
B.TECH	2	4
Any other	12	23
Total	52	100
Marital status		
Single	42	81
Married	10	19
Total	52	100
Monthly income (Rs)		
Below Rs. 15000	36	69
Rs. 15001-25000	10	19
Rs.25001-35000	4	8
Above 35000	2	4
Total	52	100

Awareness and Perception regarding Digital Wallets

The respondents were asked about their awareness and perception towards digital wallets,

Table 2. Respondents Awareness regarding Digital Wallets

Extent of Awareness Among Respondents	Number of Respondents	Percentage of Respondents
Fully Aware	32	61
Partially Aware	16	30
Not Aware	4	9
Total	52	100

Table 2 reveals that good majority of 61 percent of the respondents are fully aware about the concept of Digital Wallets, while 30 percent of the respondents are partially aware. A meager 9 percent of them are not at all aware about the Digital wallet.

Table 3. Respondents awareness regarding different types of Digital wallets

Types of Digital Wallets	Number of respondents	Percentage of respondents	Total
Google wallet	38	73	52

Patym digital	44	85	52
Mobi kwick	26	50	52
Mrupee	12	23	52
Freecharge	46	88	52
Payu	10	19	52
Money on mobile	16	31	52
Juspay	10	19	52
ICICI pocket card	36	69	52

Results indicated that an overwhelming majority of the respondents are aware of Freecharge (88 percent) and Patym Digital (85 percent) digital wallets as evident from Table 3. Further 73 percent are aware of google wallet, 69 percent of ICICI pocket card and nearly 50 percent Mobi kwick. Awareness level is less regarding other digital wallets.

Table 4. Usage of digital wallet for financial transaction

Responses	Number of respondents	Percentage of respondents
Yes	24	46
No	28	54
Total	52	100

Furthermore Table 4 reveals that 46 percent respondents are using digital wallets for financial transaction while 54 percent respondent is not using these for any financial transaction purpose. Hence there is a big untapped potential for its usage.

Table 5. Sources of information of digital wallet

Sources	Number of respondents	Percentage of respondent
Friend	22	42
Banker	18	35
Advertisement	12	23
Total	52	100

Survey results indicate that 42 percent of the respondents became aware about digital wallet from their friends, 35 percent from their bankers and nearly 23 percent from advertisement (Table 5).

Table 6. Types of Digital Wallets being Used

Types of Digital Wallets	Number of respondents	Percentage of respondents	Total
Google wallet	8	15	52
Paytm digital	38	73	52
Mobi kwick	4	8	52
Mrupee	10	20	52
Freecharge	30	60	52
Payu	12	24	52
Money on mobile	16	32	52
Juspay	8	16	52
Icici pocket card	32	64	52

It is evident from Table 6 that majority of the respondents have personally used Paytm Digital (73 percent), ICICI pocket card (64 percent), and Freecharge (60 percent). A comparatively lesser number has used Money on Mobile (32 percent) and even lesser other types of digital wallets.

Table 7. Number of Times Digital Wallets Have Been Used by Respondents

No. of Times	Number of respondents	Percentage of respondents
Only once	2	4
2- 5 times	18	35
5-10 time	22	43
More than 10 times	10	18
Total	52	100

Results indicate that nearly 43 percent of the respondents have used the digital wallets for more than 5-10 times followed by 35 percent who have used it for 2-5 times. A smaller 18 percent have used it more than 10 times. On the contrary a meagre 4 percent have used it only once (Table 7).

Table 8. Frequency of Usage of digital wallet

Frequently of Usage	Number of respondents	Percentage of respondents
Daily	2	4
Weekly	26	50
Monthly	14	26
Quarterly	10	20
Total	52	100

With regards of frequency of usage of digital wallets, Table 8 shows that 50 percent of the respondents use digital wallets weekly, 26% use this service on basis and 20 percent use it quarterly. A meager 4 percent use it for daily basis.

Table 9. Typical load of your Digital Wallet

Wallet Load (Rs)	Number of respondents	Percentage of respondents
Upto 10,000	32	61
Upto 50,000	14	27
Upto 1,00,000	6	12
Upto 5,00,000	0	0
Total	52	100

Table 9 reports that 61 percent respondents have upto Rs 10,000 digital wallet load. The respondent whose wallet load is upto 50,000, their percentage is 27%. Nearly 12 percent respondents have upto Rs 1, 00,000 loads.

Hence typically the load is less than Rs. 10,000 for usage of digital wallets, which is quite lower in value.

Table 10. Typical Amount spent on last transaction in (Rs)

Amount (Rs)	Number of respondents	Percentage of respondent
Less than 500	12	23
500-1000	10	19
1000-2000	12	23
2000-5000	12	23
5000-10,000	6	12
10,000-50,000	0	0
Total	52	100

Table 10 indicates that the amount spend on last transaction is typically less than Rs. 500 (23 percent), or ranges from 1000 – 5000 (nearly 46 percent). A comparatively lesser of 12 percent spends between Rs. 5000-10000. None of the respondents spend an amount greater than Rs. 10000.

Customer Preferences and Satisfaction towards Digital Wallets

The results revealed the preference of customers for digital wallets of different companies as well as their satisfaction regarding the same.

Table 11. Most Preferred Digital Wallet

Types of Digital Wallets	Number of respondents	Percentage of respondents
Google wallet	2	4
Paytm digital	16	31
Mobi kwick	1	2
Mrupee	1	2
Freecharge	13	25
Payu	1	2
Money on mobile	2	4
Juspay	1	2
Icici pocket card3	15	29
Total	52	100

A perusal of Table 11 clearly indicates that Paytm Digital, is the most preferred digital wallets followed by ICICI pocket card3 and Freecharge. All the other digital wallets are preferred less.

Table 12. Degree of Satisfaction regarding usage of digital wallet

Statements/Criteria	Highly Satisfied	Satisfied	Neutral	Dissatisfied	Strongly Dissatisfied	Total
Track of expenditure	10	30	10	2	0	52
Ease of access	22	20	10	0	0	52
Easy to use	30	14	8	0	0	52
Safe and secure	4	16	24	6	2	52
Discount available	12	10	20	10	0	52
Premium offer	16	22	6	8	0	52

With regards to the degree of satisfaction regarding usage of digital wallets, Table 12 reveals that respondents are highly satisfied with the ease of use and ease of access and quite satisfied with the track of expenditure and premium offers. With regards to safety and security issues and discounts available the respondents are either neutral or somewhat dissatisfied too.

Reasons for Usage and Barriers to usage of Digital Wallets

Based on the survey results the prime purpose and reasons for usage of digital wallets were identified. Further the barriers responsible for limited use of the same were explored.

Table 13. Purpose for which digital wallets are Used

Reasons for usage of digital wallets	Number of respondents	Percentage of respondents	Total
Online shopping	40	80	52
Retail shopping	18	36	52
Booking movies ticket	24	48	52
For paying bills	28	56	52
Transfer to bank	8	16	52
Recharge	18	36	52
Gifts	6	12	52

Survey results reveal that most of the people use this E-wallet facility for online shopping (nearly 80 percent) while 56 percent use it for paying bills. Another 48 percent use to for booking movie tickets

followed by 36 percent for retail shopping and recharge. Fewer respondents used it for transfer to banks and gifts (Table 13).

Table 14. Reasons that motivate you to use digital wallet for transaction

Factors	Number of respondents	Percentage of respondent	Total
Time saving	46	88	52
Track of expenditure	20	38	52
Ease of access	38	73	52
Easy to use	42	80	52
Safe and secure	34	65	52
Discount available	18	35	52

Table 14 reveals that the main reasons that motivate respondents to use digital wallets for transaction purpose is time saving (88 percent), followed by the ease of use (80 percent) and ease of access (73 percent). Further a good majority of 65% respondents use it for safe and secure purpose. However a comparatively lesser percentage of 35 percent considered the discount available as one of the reasons for using the same.

Table 15. Barriers to Usage of digital wallet

Reasons for limited usage	Number of respondents	Total	Percentage of respondent
Concern about Security of mobile payment	16	52	31
It is easier to pay cash with debit and credit card	10	52	19
I have never really thought of it	10	52	19
It is too time consuming to set up	20	52	38
It cannot used for international transaction	22	52	43
It involves danger of losing your money	26	52	50
These non cash transaction result overspending	12	52	23

The above table shows that 50% of the respondents feel that they make limited use of that facility because it involves the danger of losing money, 43% respondent feel it can't be used for international trading, nearly 38 percent feel it is quite time consuming and 31 percent are concerned about security issues. Hence the prominent barriers for limited use of digital wallets are fear of money loss, non usability for international transactions, time consuming and security concerns. Other reasons are very limited.

Association of Age and Gender demographics with Usage of Digital Wallets: Testing of Hypothesis

Table 16 and 17 depicts the association of age and gender demographics with usage of digital wallets based on Chi Square test results.

Table 16. Association between Age and Adoption of Digital Wallets: Empirical Results of Chi Square Test

Usage of Digital Wallets	Chi Square Test Results	Asymp. Sig. (2-sided)	
		Value	
Type of Digital Wallet Used	Pearson Chi-Square	8.724 ^a	.190
	Likelihood Ratio	8.019	.237
	Linear-by-Linear Association	3.475	.062*
Most preferred digital wallet	Pearson Chi-Square	14.011 ^a	.525
	Likelihood Ratio	15.302	.430

Typical Load of Digital Wallet	Linear-by-Linear Association	1.443	.230
	Pearson Chi-Square	12.033 ^a	.061
	Likelihood Ratio	10.141	.119
Typical Amount of your last transaction through digital wallet	Linear-by-Linear Association	7.876	.005**
	Pearson Chi-Square	13.993 ^a	.301
	Likelihood Ratio	16.333	.176
Purpose of usage of digital wallets	Linear-by-Linear Association	6.558	.010*
	Pearson Chi-Square	18.417 ^a	.623
	Likelihood Ratio	17.554	.677
Reasons that motivate you to use digital wallets for your financial transactions	Linear-by-Linear Association	.338	.561
	Pearson Chi-Square	14.960 ^a	.454
	Likelihood Ratio	14.330	.501
Barriers to usage of digital wallets	Linear-by-Linear Association	1.438	.230
	Pearson Chi-Square	36.337 ^a	.051
	Likelihood Ratio	18.967	.754
	Linear-by-Linear Association	.728	.394

Source: Author's calculations based on primary data.

Notes: ** Indicates significant at 5% level of significance.

* Indicates significant at 10% level of significance.

Chi Square test results indicate a significant association between type of digital wallets used and age of respondents at 10 percent significance level. Also significant association is found between amount of last transaction of digital wallet and age of respondents at 10 percent level of significance. Also a significant association is found between typical load of digital wallets and respondent age at 5 percent significance level.

Table 17. Association between Gender and Adoption of Digital Wallets: Empirical Results of Chi Square Test

USAGE OF DIGITAL WALLETS		Value	Asymp. Sig. (2-sided)
Type of Digital Wallet Used	Pearson Chi-Square	1.131 ^a	.568
	Likelihood Ratio	1.501	.472
	Linear-by-Linear Association	1.002	.317
Most preferred digital wallet	Pearson Chi-Square	3.951 ^a	.557
	Likelihood Ratio	4.714	.452
	Linear-by-Linear Association	1.959	.162
Typical Load of Digital Wallet	Pearson Chi-Square	11.917 ^a	.003
	Likelihood Ratio	15.551	.000
	Linear-by-Linear Association	9.533	.002**
Typical Amount of your last transaction through digital wallet	Pearson Chi-Square	10.295 ^a	.036
	Likelihood Ratio	13.384	.010
	Linear-by-Linear Association	2.042	.153
Purpose of usage of digital wallets	Pearson Chi-Square	8.929 ^a	.258
	Likelihood Ratio	11.832	.106
	Linear-by-Linear Association	.493	.483
Reasons that motivate you to use	Pearson Chi-Square	3.647 ^a	.601

digital wallets for your financial transactions	Likelihood Ratio	4.731	.450
	Linear-by-Linear Association	.321	.571
Barriers to usage of digital wallets	Pearson Chi-Square	9.612 ^a	.293
	Likelihood Ratio	12.199	.143
	Linear-by-Linear Association	1.426	.232

Source: Author's calculations based on primary data.

Notes: ** Indicates significant at 5% level of significance.

* Indicates significant at 10% level of significance.

Chi Square test results indicate significant association between typical load of digital wallet and gender at 5 percent level of significance.

FINDINGS AND CONCLUSION OF THE STUDY

In an era of digitalization, the study aims to study the customer perception, usage pattern preferences and satisfaction level regarding digital wallets based on a study of 52 respondents. It further identifies the barriers and challenges to the adoption of the same.

The results indicate that there exists a huge untapped market for digital wallets both in terms of increasing awareness as well as its usage. Also, the frequency and value of each transaction using digital wallets remains limited. Online shopping emerged as the prime purpose for usage of digital wallets. The study observed that respondents prefer using wallets because they save time and are easy to use and access. However, safety of money transacted remains their major concern. Security issues in terms of fear of cash loss and lack of usability for international transactions are the prime barriers to its adoption. Whilst the age of respondent had some significant impact on types, amount and loads of digital wallets, gender just had an impact on the load of digital wallets.

The study makes a valuable contribution to research in the area of finance, by exploring digital payment systems in India. However, considering the currency of the area of research and the ever expanding opportunity sets, there still exists a lot of scope for research into the safety and security issues for its effective adoption. Further research could explore in greater depth the association between other demographic variables like income level, educational level, nature of job, marital status etc.

REFERENCES

Bamasak, O. (2011). Exploring consumers acceptance of mobile payments—an empirical study. *International Journal of Information Technology, Communications and Convergence*, 1(2), 173-185.

Dahlberg, T., & Öörni, A. (2007). Understanding changes in consumer payment habits—do mobile payments and electronic invoices attract consumers? In 40th HICSS (Hawaii International Conference on System Sciences).

Dahlberg, T., Mallat, N., & Öörni, A. (2003). Trust enhanced technology acceptance model consumer acceptance of mobile payment solutions: Tentative evidence. *Stockholm Mobility Roundtable*, 22, 23.

Dahlberg, T., Mallat, N., Ondrus, J., & Zmijewska, A. (2008). Past, present and future of mobile payments research: A literature review. *Electronic Commerce Research and Applications*, 7(2), 165-181.

Digital Research Inc., (2013), *Mobile application and Digital Wallet usage*, USA: Cashstar.

Doan, N. (2014). Consumer adoption in mobile wallet: a study of consumers in Finland.

Kwan, J., Nadeau, M. C. & Steitz, J. (2015). Digital wallets in the U.S.: Minding the consumer adoption curve. *McKinsey on Payments*, 8(22), 26-31.

Liu, S., Zhuo, Y., Soman, D., & Zhao, M. (2012). The consumer implications of the use of electronic and mobile payment systems.

Padashetty, S., & Kishore, K. S. (2013). An Empirical Study on Consumer Adoption of Mobile Payments in Bangalore City-A Case Study. *Researches World*, 4(1), 83.

Rathore, H. S. (2016). Adoption of Digital Wallet by Consumers. *Bvimsr's Journal of Management Research*, 8(1), 69.

Rogers, E. M. (2010). *Diffusion of innovations*. Simon and Schuster.

Soman, D. (2001). Effects of payment mechanism on spending behavior: the role of rehearsal and immediacy of payments. *Journal of Consumer Research*, 27(4), 460–474.

Soman, D. (2003). The effect of payment transparency on consumption: quasi-experiments from the field. *Marketing Letters*, 14(3) 173–183.

Soman, D., & Cheema, A. (2002). The Effect of Credit on Spending Decisions: The Role of the Credit Limit and Credibility. *Marketing Science*, 21(1), 32–53.

Soman, D., & Gourville, J.T. (2001). Transaction decoupling: how price bundling affects the decision to consume. *Journal of Marketing Research*, 38(1), 30–44.

Srivastava, J., & Raghurir, P. (2008). Monopoly Money: the effect of payment coupling and form on spending behavior. *Journal of Experiential Psychology Applied*. 14(3), 213–225.

Taheam, K., Sharma, R., & Goswami, S. (2016). Drivers of Digital Wallet Usage: Implications for Leveraging Digital Marketing. *International Journal of Economic Research*, 13(1), 175-186.

Wamuyu, P. K. (2014). The role of contextual factors in the uptake and continuance of Mobile money usage in Kenya. *The Electronic Journal of Information Systems in Developing Countries*, 64.