# CASH LESS ECONOMY THROUGH DIGITAL REVOLUTION – A BIRD'S EYE VIEW ON THE IMPACT OF MOBILE WALLET SERVICES

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#### Abstract

Payments and Settlements are the important aspect of Financial System. There has been a substantial progress in the infrastructure development, FinTech adoption, Digital fund transfer, Security, Regulatory sandboxes etc, in the Financial sector over the years. Digital payments are at the heart of modern Indian economy. One such innovative platform for digital payments in use especially since demonetisation is Digital Wallets. Mobile wallets have made banking services available 'on tap'. Transactions through mobile wallets in India have increased 40 times in the past five years. The purpose of the research is to analyze the satisfaction level of users towards mobile wallet services and to know the factors which causes dissatisfaction.

Keyword: Mobile Wallet, E-Wallet, Usage satisfaction, Digital Payments, Digital Economy

## 1.INTRODUCTION

Digital payments are at the heart of modern Indian economy. Digital payment is where both payer and payee use digital modes to send and receive money. Demonetisation and an active growth in GDP, brought down the physical cash circulation to a distinctive level. (RBI, 2020a) Notes in circulation (NIC) would have been ₹26,04,953 crore in October 2019, however, it was ₹22,31,090 crore. It is evident that the actual growth rate of NIC in October 2019 in India, was far lesser than that of the expected rate. This indicates that the digitisation and reduction in cash usage helped reduce NIC by over ₹3.5 lakh crore. The various initiatives undertaken by the Reserve Bank in the payments ecosystem during the

year 2019-20 were oriented towards encouraging healthy competition, improving customer convenience at affordable cost and increasing customer confidence in the payment systems (RBI, 2020b). Electronic payment transactions are categorized as, (a) Online payment transactions and (b) Face-to-face/ Proximity payment transactions. Online payment transactions are the transactions that do not require the users to be physically present at the point of transaction, and Faceto-face payment transactions are that requires the users to be at the point of transaction. Example for the online payment transactions could be digital wallets, internet banking etc. Point of sale is the example for Face-to-face payment transaction. The overarching goal of the Reserve Bank in the payments ecosystem is to ensure deepening of digital payments across the country, both in terms of adoption and penetration, supported by customer-centric measures to enhance the safety and security of payment systems(RBI, 2020b). Digital wallets are one the better platforms to settle cashless transactions. It is an innovation which supports the motive of Government of India to ensure deepening of digital payments across the country.

### 2. PROBLEM STATEMENT

The Digital transactional platforms hold the key to the future success in banking. Government has taking various steps in providing access to financial products and services through digital platforms. The problem in practice is if consumers are satisfied with those digital financial services and what are the factors that contribute to the usage satisfaction level. Considering this, the objectives for the study are framed.

### 3. LITERATURE REVIEW

(Addai et al., 2015) Recent growth in technology and innovation has fast-tracked the desire of customers of banks for exceptional services to meet the current trend of technological advancement. The research measured that convenience, availability and reliability of e-banking services have a strong impact on the customer satisfaction. (Singh et al., 2017) Recent growth in technology and innovation has fast-tracked the desire of customers of banks for exceptional services to meet the current trend of technological advancement. The research measured that convenience, availability and reliability of e-banking services have a strong impact on the customer satisfaction. (Anitha K M, 2019) Banks must increase awareness among consumers about mobile wallets advantages like time saving, security, selfefficacy, pleasure, etc. Marketers should take advantage of the features of M-wallets in promoting digital payment systems in India. (Miruna, 2019) Easy and convenient usage, Instant payment, Easier(Tiwari & Singh, 2019) analysed the factors that affect consumer satisfaction with cashless payment systems in India with reference to Paytm and BHIM. Factors like Service quality, Mode of Service delivery, Price, Perceived

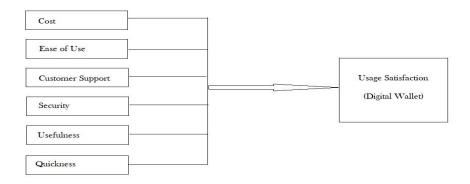
usefulness, Knowledge and risk are taken as independent variables and customer satisfaction as dependent variable. The results showed that these factors have strong impact on the customer satisfaction of Cashless payment system.

### 4. RESEARCH GAP

From the Review of literature, a number of studies have been carried out to study the impact of digital wallets on the usage satisfaction. Combination of factors used is different from the other researches. The sample for study is conducted in Chennai city, India. The various studies conducted earlier had dependent variable Mobile payment and Digital payments while the current study focusses only on the digital wallet.

# 5. CONCEPTUAL FRAMEWORK

In the light of the literatures reviewed mainly on the digital payment, this study conceptualizes that the various factors of digital wallet which spares for the usage satisfaction.



# 6. RESEARCH QUESTIONS

What are the ingredients of satisfaction involved in the use of digital wallets?

Is there a significant effect of factors (Cost, Ease of Use, Customer support, Security, Usefulness and Quickness) on the usage satisfaction of digital wallet users?

Fig. 1

Research Methodology

Many studies were already conducted around the globe on digital payments. There are various factors that contributes to the usage of Digital Wallets. The present study spotlights on the factors of cost and convenience of the consumers in using e-Wallets.

## 7. RESEARCH HYPOTHESIS

H01: There is no relationship between Cost and Usage satisfaction

H02: There is no relationship between Ease of Use and Usage satisfaction

H03: There is no relationship between Customer support service and Usage satisfaction

H04: There is no relationship between Security and Usage satisfaction

H05: There is no relationship between Usefulness and Usage satisfaction

H06: There is no relationship between Quickness and Usage satisfaction

# 8. RESEARCH OBJECTIVES

The objectives of the study are to analyse the impact of digital wallet service delivery on users' satisfaction and to measure users' satisfaction levels regarding the digital wallet services.

### 9. DATA COLLECTION

The research is based on both primary and secondary data collected through questionnaire, Publications of RBI, various articles published in journals and various research papers. Primary data is gathered using an online questionnaire (Google form), which combines multiple-choice and open-ended questions. A sample of 120 respondents is collected for the study.

### 10. LIMITATIONS OF THE STUDY

The study was confined to the study to 120 respondents only. The results derived based on sample may not be generalized on population. The study was considered for the period of 2019-20, but the perception may change in future. Moreover, the study was confined to in the area of Chennai only; therefore, the results may not be pertinent to the customers in other parts of the country.

# 11. DATA ANALYSIS AND INTERPRETATION

Basis	Category	Frequency	Percent	
Gender	Male	62	51.7	
	Female	58	48.3	
Age	Up to 25	52	43.3	
	26-40	67	55.8	
	41-55	1	0.8	
Education	School level	4	3.3	
	Graduation	43	35.8	
	Post-graduation	57	47.5	
	Above	16	13.3	
Occupation	Student	35	29.2	
	Housewife	10	8.3	
	Employed	69	57.5	
	Self-Employed	6	5	
Monthly Income	Below 20000	65	54.2	
	20001-35000	24	20	
	35001-50000	16	13.3	
	Above 50001	15	12.5	
Marital Status	Single	74	61.7	
	Married	46	38.3	

The table reveals that 51.7% of the respondent are male and 48.3% are female. Majority of the respondents are between the age group 26 and 40 (55.8%) and there is only one respondent in the age group between 41 and 55(0.8%). Most of the respondents are Post-graduate (47.5%) and 35.8% are graduates, which indicates that sample is conducted among the educated Chennai residents. Majority of the respondents are employed

(57.5%) and 29.2% of respondents are students. This implies digital wallets are popular among students as well. 54.2% of respondents are earning a monthly income of less than Rs. 20000. 12.5% of respondents are who earns above Rs. 50000 per month. 74 respondents (61.7%) are single and the rest (38.3%) are married.

**Table 2. Descriptive Statistics of Usage Satisfaction** 

	N	Range	Mean	Std. Deviation	Variance
Overall Usage Satisfaction	120	53	79.17	9.821	96.448
Valid N (listwise)	120				

For the purpose of investigation, descriptive statistics and linear regression were used to evaluate the relationship between variables. Components of digital wallet on usage satisfaction were measured using a 5-

point Likert scale with 5 = strongly agree and 1 = strongly disagree. Mean value of overall usage satisfaction is 79.17 which indicates that there is a higher level of satisfaction among the users of digital wallets.

**Table 3. Cost and Usage Satisfaction** 

				Std. Error	Change Statistics				
		R	Adjusted	of the	R Square				Sig. F
Model	R	Square	R Square	Estimate	Change	F Change	df1	df2	Change
1	.640ª	.409	.404	7.580	.409	81.769	1	118	.000

a. Predictors: (Constant), Cost

Linear regression analysis was used to explore the impact of the independent variables Cost on the dependent variable Usage satisfaction. The result shows

that the hypothesis H01is rejected which explains that there is a strong relationship between Cost and Usage satisfaction.

Table 4. Ease of Use and Usage Satisfaction

					Change Statistics				
			Adjuste	Std. Error	R	F			
		R	d R	of the	Square	Chang			Sig. F
Model	R	Square	Square	Estimate	Change	е	df1	df2	Change
1	.644ª	.415	.410	7.546	.415	83.540	1	118	.000

a. Predictors: (Constant), Ease of Use

The result from the linear regression, as shown above provides support for rejecting the hypothesis H02 at 1% level of significance. It is evident that there is a strong

relationship the independent variable Ease of Use and dependent variable Usage satisfaction.

**Table 5. Customer Support and Usage Satisfaction** 

				Std.	Change Statistics				
			Adjuste	Error of	R	F			
Mod		R	d R	the	Square	Chang	df		Sig. F
el	R	Square	Square	Estimate	Change	е	1	df2	Change
1	.557ª	.311	.305	8.188	.311	53.212	1	118	.000

a. Predictors: (Constant), Customer Support

The above result from Table. 5 shows that hypothesis is rejected proving that there exists a strong relationship between customer support and usage satisfaction of digital wallet users. It also indicates that customer support accounts for a variance in usage satisfaction with R=.305

**Table 6. Security and Usage Satisfaction** 

				Std.	Change Statistics				
			Adjuste	Error of	R	F			
Mod		R	d R	the	Square	Chang	df		Sig. F
el	R	Square	Square	Estimate	Change	е	1	df2	Change
1	.513ª	.263	.257	8.465	.263	42.163	1	118	.000

a. Predictors: (Constant), Security

Linear regression result shows that there is relationship between security and satisfaction of users' in using digital wallets. The above result provides support for rejecting the hypothesis H04 at 1% level of significance.

**Table 7. Usefulness and Usage Satisfaction** 

_					Change Statistics				
			Adjuste	Std. Error		F			Sig. F
Mod		R	d R	of the	R Square	Chang	df		Chang
el	R	Square	Square	Estimate	Change	е	1	df2	е
1	.552ª	.305	.299	8.221	.305	51.830	1	118	.000

a. Predictors: (Constant), Usefulness

Usefulness and Usage satisfaction as well has a strong relationship, which is evident from the above analysis of Linear regression. The total R2 value includes a result

which rejects hypotheses H05 with (R2 = .305) shown in Table 7.

**Table 8. Time saving and Usage Satisfaction** 

					Change Statistics				
			Adjuste	Std. Error	R				Sig. F
Mod		R	d R	of the	Square	F	df		Chang
el	R	Square	Square	Estimate	Change	Change	1	df2	е
1	.624ª	.390	.385	7.705	.390	75.340	1	118	.000

a. Predictors: (Constant), Quickness and Time saving

The result from the linear regression, as shown above provides support for rejecting the hypothesis H06 at 1% level of significance. It is evident that there is a strong

relationship the independent variable Time saving and dependent variable Usage satisfaction.

**Table 9. Model Summary - Overall Usage Satisfaction** 

			Adjusted R	Std. Error of
Model	R	R Square	Square	the Estimate
1	.900ª	.810	.800	4.397

a. Predictors: (Constant), Usefulness, Security, Customer Support, Quickness and Time saving, Ease of Use, Cost

Table 10. ANOVAa

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	9292.663	6	1548.777	80.109	.000 <sup>b</sup>
Residual	2184.662	113	19.333		
Total	11477.325	119			

The model summary is illustrated in Table 9 was developed to identify the value of R2 which explains the explicability of the model. In this model, the value of R2 is .810. for the construct's usage satisfaction for digital wallet services in India which interprets that cost, ease of use, customer support, security, usefulness and timesaving variables can explain the variance towards

predicting usage satisfaction to the extent of 81%. The significance value of this model was 0.00, therefore, this model is accepted.

# 12. CONCLUSION

The study aimed to provide results for the impact of digital wallet usage on the satisfaction of users. The

independents variables Cost, Ease of Use, Customer Support, Security, Usefulness and Time saving have a significant impact and strong relationship with the usage satisfaction of users of digital wallets. Digital wallet is an innovation in FinTech revolution and the study evident that the users are satisfied with the usage. Thus, continuing the satisfaction level will improve the users to do digital payments rather than traditional payment methods, which could be a major factor in fulfilling Government's goal 'Digital India'.

# **REFERENCES**

- [1] Addai, B., Ameyaw, B., Ashalley, E., & Quaye, I. (2015). Electronic Banking and Customer Satisfaction: Empirical Evidence from Ghana. British Journal of Economics, Management & Trade, 9(3), 1–8. https://doi.org/10.9734/bjemt/2015/19269
- [2] Anitha K M. (2019). Users' Satisfaction With Electronicpayment System: a Study With Special Reference To Ottapalam Muncipality. Cikitusi Journal for Multidisciplinary Research, 6(4), 164–171.
- [3] Miruna, S. L. (2019). A Stusy on Customer Satisfaction Towards E wallets in Tirunelveli City. Ijciras, 2(1), 3–6.
- [4] RBI. (2020a). Assessment of the progress of digitisation from cash to electronic. February. https://m.rbi.org.in/Scripts/PublicationsView.as px?id=19417
- [5] RBI. (2020b). Payment and Settlement Systems and Information Technology. Annual Report. https://www.rbi.org.in/scripts/AnnualReportPu blications.aspx?Id=1293
- [6] Singh, N., Srivastava, S., & Sinha, N. (2017). Consumer preference and satisfaction of M-wallets: a study on North Indian consumers. International Journal of Bank Marketing, 35(6), 944–965. https://doi.org/10.1108/IJBM-06-2016-0086
- [7] Tiwari, N., & Singh, N. K. (2019). Factor Affecting Consumer Satisfaction in Cashless Payment Systems in India with Respect to Paytm and BHIM. International Journal of Recent Technology and Engineering, 8(3S2), 10–15. https://doi.org/10.35940/ijrte.c1002.1083s219

- [8] Phophalia, S., Goswami, G., Prasad, M., Arora, M., & Graph, B. (2018). A Study on Impact on Customer Satisfaction for E-Wallet Using Path Analysis model. Journal of Banking and Insurance Law, (July).
- [9] Razilan Abdul Kadir, M. et al. (2016). User Satisfaction with Electronic Resources. Journal of E-Learning and Higher Education, 2016, 13. https://doi.org/10.5171/2016.408838
- [10] Qteishat, M. K., Alshibly, H. H., & Al-ma'aitah, M. A. (2014). The impact of e-ticketing technique on customer satisfaction: an empirical analysis. Journal of Information Systems and Technology Management, 11(3), 519–532. https://doi.org/10.4301/s1807-17752014000300001
- [11] Mirza, M. S., & Mahmood, K. (2012). Electronic resources and services in Pakistani university libraries: A survey of users' satisfaction. International Information and Library Review, 44(3), 123–131. https://doi.org/10.1080/10572317.2012.107629 23
- [12] Smolarczyk, A. (2018). Customer Satisfaction With Mobile Payments. Aalto University, School of Business, 764.
- [13] Kar, A. K. (2020). What Affects Usage Satisfaction in Mobile Payments? Modelling User Generated Content to Develop the "Digital Service Usage Satisfaction Model." Information Systems Frontiers. https://doi.org/10.1007/s10796-020-10045-0
- [14] Shaw, B., & Kesharwani, A. (2019). Moderating Effect of Smartphone Addiction on Mobile Wallet Payment Adoption. Journal of Internet Commerce, 18(3), 291–309. https://doi.org/10.1080/15332861.2019.162004
- [15] Ybarra, A., & Janda, S. (2005). Do Product and Consumer Characteristics Affect the Relationship Between Online Experience and Customer Satisfaction? Journal of Internet Commerce, 4(4), 133–152. https://doi.org/10.1300/J179v04n04
- [16] Kumar, R., Sachan, A., & Dutta, T. (2020). Examining the Impact of e-Retailing Convenience Dimensions on Behavioral Intention: The Mediating Role of Satisfaction.

- Journal of Internet Commerce, 0(0), 1–29. https://doi.org/10.1080/15332861.2020.178836
- [17] Van Montfort, K., Masurel, E., & Van Rijn, I. (2000). Service satisfaction: An empirical analysis of consumer satisfaction in financial services. Service Industries Journal, 20(3), 80–94. https://doi.org/10.1080/02642060000000033
- [18] Richard G. Netemeyer, W. O. B. (1999).
  Handbook of Marketing Scales. In SAGE
  Publication (Second).
  https://doi.org/10.4135/9781452224923
- [19] Reddy, M. R. S. M. S. (2019). Customer Satisfaction Towards the Mobile Wallets Usage-An Empirical Analysis among the Rural Bank Customers in the State of Telangana. International Journal of Innovative Studies in Sociology and Humanities, 4(2), 55–58.
- [20] Wang, X., & Li, Y. (2015). Users' satisfaction with social network sites: A self-determination perspective. Journal of Computer Information Systems, 56(1), 48–54. https://doi.org/10.1080/08874417.2015.116458 00