

A Study On Impact Of Rewards And Offers On Acceptance Of Mobile Payments

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Abstract

Mobile payment refers to payment services which are carried out through mobile wallets and Unified Payment Interface. The main advantage of using Mobile payment is that we can make variety of transactions through a mobile wallet and UPI which includes ticket booking, bill payments, recharges, In-store payments etc. Any technology requires motivation for its acceptance and monetary incentives are the most preferred kind of motivation among the users. While mobile wallet companies are providing various rewards and offers to the users in order to promote their wallets and motivate the users to use their services, it is still unclear whether these financial incentives have an impact on users on user's payment choices. This research intends to investigate how people perceive the rewards and offers for accepting mobile payments. This study was done through descriptive research design. Data was collected from the users of mobile wallets by using structured questionnaire. Using a non-probability, purposive sampling technique and an online/email survey, about 153 responses were gathered. The data was then evaluated using relevant statistical techniques, the results were given, and the results were validated using appropriate discussions. With suitable statistical techniques and analysis, this study finds that, despite wallet companies are providing various rewards and offers, the customers are neither satisfied and nor dissatisfied and in the state of mixed feelings. It may be concluded that users are not completely excited with the rewards and offers.

Keywords: Mobile Payments, Cashless, Promotions, Rewards, Motivation, offers, referrals.

1. Introduction

In any transaction, the level of convenience is significant (Verkijika S F and Neneh B N 2021). The ability to transact with less difficulty can motivate people to engage in more transactions (Liu Y and Dewitte S 2021). Previous studies have shown that cash and credit cards are similar regarding the pain of payment (Boden, J et al., 2020). While physical wallets are useful for keeping all your valuables, money, cards, travel documents safe, the mobile wallets have taken the benefits a step further by giving the users an access to all of them electronically without the need for carrying it in a physical form. The recent technological advancements have resulted in significant changes in the way people live, work, cooperate, and trade (Gong X et al., 2020). The convenience of transactions offered by mobile payment services is what makes them appealing to users (Do N.H et al., 2020).

While there are many benefits associated with the mobile payments which can motivate the customers to adopt, like convenience, variety of services, transaction speed, the uncertainties around the performance and usage of new technologies have made customers more reluctant in pursuing it wholeheartedly (Sankaran R and Chakraborty S

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2021). This demands for more motivation for the users. Motivations are typically divided into two types based on the nature of the motivator: intrinsic and extrinsic. Intrinsic motivation comes from within, such as a strong desire to complete a task, but extrinsic motivation comes from outside sources. According to the incentive theory, people are more motivated to participate in activities if they are rewarded afterward, rather than simply because they enjoy the action (Jung J.-H et al., 2020).

To promote their mobile wallet and increase the share of the market, Mobile wallet companies are providing rewards and offers to their customers (Zhang L et al., 2022). Since most of the wallet companies are providing similar offers and rewards, it is important to understand the response of the customers to these offers. Rewards and offers may increase the usage of wallets but to what extent it is influencing the customers is unknown, similarly it is unclear whether the customers are happy with the rewards and offers. Unless the answers to these questions are known, it is difficult to come to conclusion on the impact of offers and rewards in acceptance.

Mobile Wallets

Mobile wallet is a digital wallet that can store all financial and nonfinancial information on a mobile device. This enables the users to make in-store payments, utility payments, fund transfers, and book tickets effortlessly. Although it is a technology oriented product, the user friendliness and usefulness of these wallets has made many users to accept and adopt it. The Acceptance of mobile wallets has huge potential and is gaining popularity as a different form of payment globally. (Liébana-Cabanillas F et al., 2020).

As per NPCI website data, Phonepe, Paytm are among the most popular mobile payments in India. Users can download the digital payment apps from app stores or have them installed in their mobile devices. The payment card Mobile wallet transactions are more safe against cyberattacks because all information maintained remains fully encrypted. The mobile wallet uses near-field communication (NFC) technology to connect with other devices, when user makes an in-store payment (Sun S et al., 2021). The payment is processed at the payment terminal using a QR code, a key, or any other kind of identification.

Unified Payment Interface

The Unified Payments Interface (UPI) is an instantaneous payment system that enables interbank, between peers, and person-to-merchant payments. It is developed by National Payments Corporation of India (NPCI). With UPI, a bank may now act as a single entity for a customer, eliminating the need to manage several banking apps with multiple IDs and passwords (Wang F et al., 2020). The growth rate of UPI has been rapid and significant since the outbreak of covid19. In pursuit of contactless transactions, people have chosen mobile payments over cash payments. UPI transactions are performed through mobile wallets. Rewards and offers are applicable for both wallet (Stored money) and UPI transactions (Direct from bank account). A transaction using the Unified Payment Interface (UPI) takes place directly between banks. Mobile wallets, on the other hand, act as an intermediate between bank accounts. The growth of UPI transactions is a significant proof that, the acceptance of mobile payments is on a rise.

The below data pertaining to UPI transactions depicts the growth of UPI in India.

Table 1 Monthly average volume of UPI (2020- 223) (Mn) Source : NPCI Website

Month	2020	2021	2022	2023
Jan	1305.0	2,302.00	4,617.15	8,038.59
Feb	1325.7	2,292.00	4,527.49	7,534.76
Mar	1246.8	2,731.00	5,405.65	8,685.30
Apr	999.6	2,641.06	5,583.05	8,898.14

May	1234.5	2,539.57	5,955.20	9,415.19
Jun	1336.9	2,807.51	5,862.00	9,335.06
Jul	1497.4	3,247.82	6,289.00	9964.61
Aug	1618.8	3555.55	6,581.00	10,586.02
Sep	1800.1	3,654.30	6,780.80	10,555.69
Oct	2071.6	4218.65	7305.42	11,408.79
Nov	2210.2	4186.48	7309.45	11,235.29
Dec	2234.2	4,566.30	7,828.90	12,020.23
Total	18881	38742	74045	117677
Monthly Average Volume (Mn)	1573	3229	6170	9806

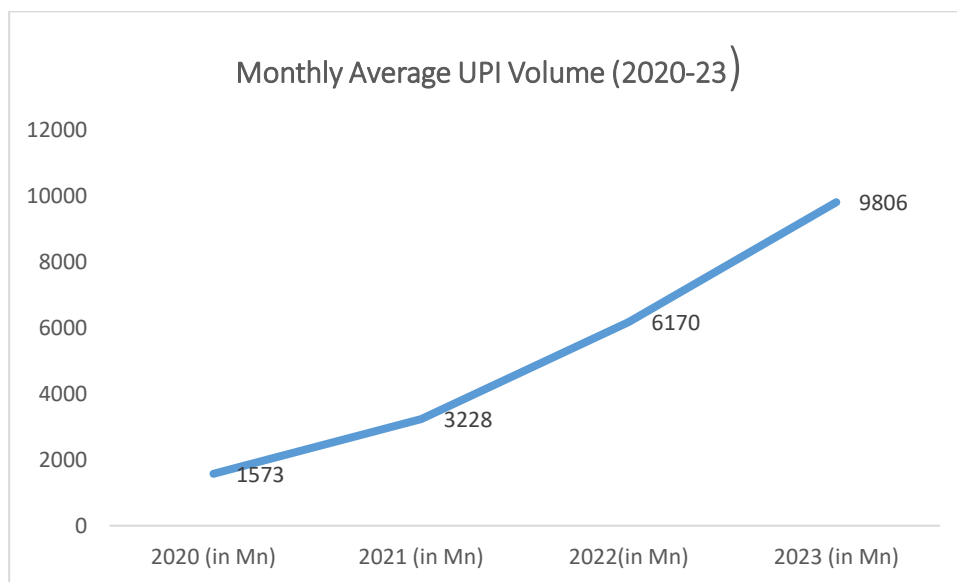


Figure 1 : Monthly average volume of UPI (2020- 223) (Mn)

Rewards and Offers

Rewards can be stated as benefit of expectations from the selected behaviours. Mobile wallet companies offer exclusive offers and cashbacks to their users in order to encourage them to transact and repeat purchases with their mobile wallets. You can get cashback on various recharges, Mobile bill payments, Retail shopping, travel ticket bookings, money transfers, and many more. And also user can earn referral money by recommending the mobile payment to his friends and family. The offers generally include all categories, which includes entertainment, Beauty and wellness, food, fuel, health care, shopping etc. Mobile wallet companies tie up with various service providers and businesses to offer cashback and rewards.

The below sample data is part of PhonePe's (Market Leader in UPI Transactions) monetary incentives given to their customers. This is an inclusive list but not an exhaustive one.

Table 2 Sample Rewards & Offers Table (Phonepe)

S.no	Category	Company	Details	Valid till
1	Wealth Management	Flipkart Axis Credit card	Get Rs.1000 Voucher + Welcome benefits	29 th Feb, 2024

2	Fashion & Clothing	Myntra	Upto 90% off + Flat Rs.250 Extra off	29 th Feb 2024
3	Fashion & Clothing	PUMA	Extra 12 % off	29 th Feb 2024
4	Fashion & Clothing	Trends	Flat Rs.500 off	29 th Feb 2024
5	Recharge & Bill Payments	Rupay UPI	Flat Rs.10 Cashback	29 th Feb 2024
6	Entertainment	Audible	3 Months Audible premium plus	29 th Feb 2024

Source: Phonepe Digital Wallet

Similarly, customers are eligible to earn Rs. 100, if their referral make their first payment usingUPI in Phonepe.

Literature Review

Digital business is shifting the present business environment in a holistic and customer-driven way by renewing processes through digitization and the development of electrical services (Istijanto and Handoko I, 2022). India is aiming to move from a cash-dominant to a cashless economy by supporting digital technologies such as mobile wallets and digital money. Mobile wallet services have been created by a significant number of organisations, and users are also adopting them (Widyanto H A et al., 2021). Many mobile wallet companies have launched their mobile payment platforms in recent years, posing significant challenges for traditional forms of payment. These companies have benefited from the increasing number of smart devices, the rise in Internet and e-commerce usage, as well as their brand recognition and direct access to user data. (Leong, L Y et al., 2022). India, being a heavily populated and emerging economy with increasing penetration of smartphones, has a lot of scope for mobile wallets' penetration (Upadhyay N et al., 2022). According to the 2021 India Mobile Payments Market Report, mobile payments are currently increasing faster than card payments in India as more individuals and companies adopt digital payments in the face of the pandemic. Transactions using debit, credit cards fell by 14% (Business Line, The Hindu, 2021). Studies indicate that perceived ease of use, usefulness, trust, security, facilitating conditions and LC influence, user attitude and intention to adopt mobile wallets.

When compared to other alternative payment methods, customers clearly view mobile wallets as useful, user-friendly, and convenient. (Liu Y et al., 2021). New technologies and innovations constantly challenge consumers, forcing them to adopt new behaviours or abandon the old ones (Huang Y et al., 2020). When a customer makes a purchase of a product or service, they simply pull money from their wallet and pay. Similarly, a credit card, a debit card, or online banking can be used to preload a set amount of money into a mobile wallet, which can then be used to make purchases effortlessly (Gong X et al., 2020)

Since people generally resist changes, there is a need to understand what motivates people's behaviour and intention to try a technology. People's tendency to act in a particular way is greatly influenced by their behavioural intention. (Verkijika S.F 2020) One of the most significant tools in a marketer's toolkit is sales promotions, such as promotional gifts, price discounts, and coupons, which are targeted at influencing consumer behaviour and generating sales (Wang, L et al., 2019). Reward programmes are activities that provide incentives to clients depending on the frequency and/or value of their purchases (Sobti, N 2019). Customers are attracted and retained through reward programmes, which offer rewards, discounts, and other unique incentives. It motivates repeat purchases as well as brand loyalty (Ramadan, R and Aita J 2018). Customers are more likely to promote companies when unclear rewards are offered, and favorable experiences act as a mediating

factor between the sort of reward and the likelihood that they will be recommended. (Aslam W et al., 2017)

In order to attract and retain customers, monetary incentives are frequently used in payment technology promotion. (Wu, J et al., 2017) It was discovered that financial incentives like as cash back, reward points, and discounts have a good impact on encouraging people to use technology instead of cash as a payment method. (Chen, C.-C and Tsang, S.-S 2019). In recent years, cash back or discount offers have been used to persuade consumers to use mobile payment. (Zhao, H et al., 2019) Especially in circumstances when customers are making recurring purchases of mobile phone services, loyalty programmes can be seen as one of the primary elements influencing consumers' decisions. (Shahin, A and Mahyari, H. K 2019)

Problem Statement

Customer satisfaction is very critical for any business success. Meeting customer expectation can only support the organisation to survive in this competitive market. But exceeding customer expectation is critical for becoming a market leader in this ever changing technology driven world. Rewards and offers turning out to be the points of difference between the businesses, when other benefits remain same.

Incentives in the form of monetary rewards can also be given to consumers who wish to use mobile wallets. Hence mobile wallet companies encouraging users to use their services with various rewards and offers but it is still unclear whether the users payment preferences are driven by these financial incentives.

In address this problem, this work aims to study the users' opinion on the rewards and offers for adopting to Mobile payments.

Research Objectives

- To analyse whether rewards and offers encourage customers to adopt mobile payments.
- To investigate the impact of demographic factors (gender, age, and education) on the motivational impact of rewards in users' adoption of mobile payments.
- To identify distinct clusters based on their demographic, Smartphone acceptance, social media adoption and validate the impact of rewards and offers on identified clusters.

Research Methodology

This study was done through descriptive research design. The purview of this study was limited to the people those who are using mobile payment apps, while excluding the mobile banking apps and online banking payment options. Structured questionnaire was prepared by using appropriate variables such as beneficial, encouragement attractive etc. All of the variables were scaled using a Five-point Likert scale. Data was collected through both online survey and manual survey. Finally, 153 valid responses were collected by using non probability, purposive sampling technique, because this research was chosen the respondents purposefully on the basis of usage of mobile payment apps. Reliability and validity of data was confirmed by using KMO and Bartlett's Test. Descriptive Analysis was done to summarize and present data in a meaningful way. Cluster Analysis, Mann Whitney Test and Kruskal - Wallis Test were done to test the assumptions of the study.

Data Analysis

Frequencies Test

Frequency test was conducted to know the respondent's perspective on rewards. The dependent variable "Rewards encourage me to use a mobile wallet" has a median value of

3 out of 5, indicates that the users neither agree or not disagree with the statement, and not completely content with the rewards and offers. The following bar chart analysis also justifies the statement.

Table 3. Frequencies Test

N	Valid	153
	Missing	0
Mean		3.07
Median		3.00
Mode		3

Table 4 Rewards encourage me to use a mobile wallet.

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	29	19.0	19.0	19.0
Disagree	20	13.1	13.1	32.0
Neither agree nor disagree	43	28.1	28.1	60.1
Agree	33	21.6	21.6	81.7
Strongly agree	28	18.3	18.3	100.0
Total	153	100.0	100.0	

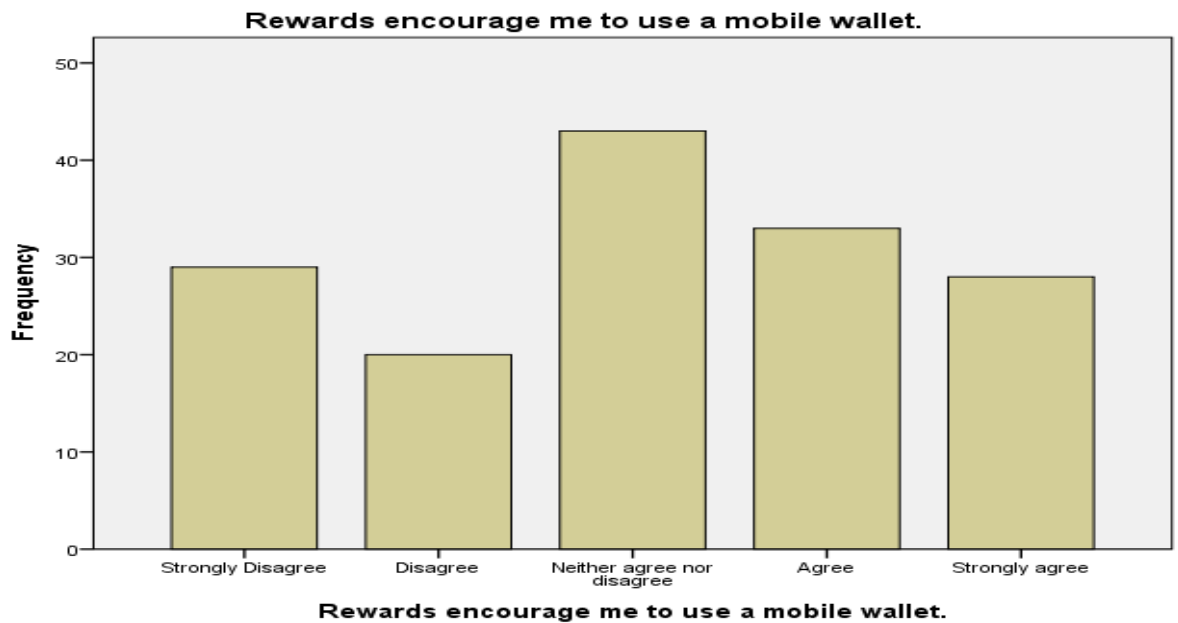


Table 5 Validity

Parameters	Values
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.876
Approx. Chi-Square	844.177
Bartlett's Test of Sphericity	Df
	28
	Sig.
	.000

Hypotheses Analysis

To determine whether there are any differences among the demographic variable groups, the following hypotheses tests have been conducted. (Gender, Age, Education) in relation to the dependent variable (R07).

- (a) Mann Whitney Test - Test was conducted to understand whether there is any difference of opinion among gender group on the role of rewards in acceptance of Mobile wallets
- (b) Kruskal Wallis Test - Test was conducted to understand whether there is any difference of opinion among Age group on the role of rewards in acceptance of Mobile wallets

Every demographic factor has been considered separately, and the group differences are examined in connection to the testing variable. (R07).

H1: Within the respondent's gender group, there is no significant difference in the rewards of using a mobile wallet.

H2: Within the respondent's age group, there is no significant difference in the rewards of using a mobile wallet.

H3: Within the respondent's education category, there is no significant difference in the rewards of using a mobile wallet.

H4 :There is no difference in the degree to which rewards encourage mobile wallet usage across different groups defined as clusters.

Hypotheses Test Results.

The Testing variable for all the Hypothesis Tests is “Rewards encourage me to use a mobile wallet”

Table 6 Hypotheses Test

Test Type	Grouping Variable	Groups	N	Mean Rank	Sum of Ranks
Two – Independent – Sample Test (Mann Whitney Test)	Gender	Male	89	72.41	6444.00
		Female	64	83.38	5336.50
Tests for several Independent samples Test - (Kruskal - Wallis Test)	Age	15 – 24	40	84.06	
		25 – 39	78	75.71	
		40 – 55	29	74.55	
		> 55	6	58.50	
Tests for several Independent samples Test - (Kruskal - Wallis Test)	Education	Higher Sec.	4	83.63	
		Graduate	98	73.61	
		Post Graduate	32	84.16	
		M.Phil/Ph.D	19	81.03	

Findings

Out of 153 respondents, 58% of responses are from males and 42% are from females. In age, 27% belongs to Generation Z (15-24), 50% of Generation Y (25 to 39), 19% of

Generation X (40 to 55) and above 55 Years constitute the remaining 4%. Frequency analysis has given a basic understanding of the demography profile of the respondents.

The following hypotheses have proved that the assumptions are right and confirmed that there was no significant difference within the demographic group variables (Gender, Age, Education) in relation to the testing variable “Rewards encourage me to use a mobile wallet”. Non Parametric test statistics is appropriate, when the data collected are ordinal in nature. Mann-Whitney test was used to find whether there is any difference existwith in the groups of gender variable (Male & Female). Alternatively Kruskal Wallis test was used to find the difference with in the groups of Age and Education, considering both the variable have more than two independent groups.

As Mann-Whitney Test result confirms that the difference between the groups are within the range and not significant (greater than 0.05) to reject, the null hypothesis was retained. similarlyKruskal-Wallis test results have also shown that the difference between the groups are within the critical region and not significant to reject null hypothesis

Table 7 Test Statistics

Test Type	Group Variable - Gender (H1)	Group Variable – Age (H2)	Group Variable - Education (H3)
Mann-Whitney U	2439.500		
Wilcoxon W	6444.500		
Z	-1.548		
Asymp. Sig. (2-tailed)	.122		
Kruskal Wallis Test			
Chi-Square		2.327	1.736
df		3	3
Asymp. Sig.		.507	.629
Hypothesis Results	.122> 0.05 (H0 is not rejected)	.507> 0.05 (H0 is not rejected)	.629> 0.05 (H0 is not rejected)

It may be inferred from the data that there were no significant differences in rewards and offers within each demographic variable group since H0 was not rejected in all hypotheses.

Cluster Analysis

Since there is no significant difference in terms of gender, age and education variable with reference to the rewards and offers, the need to understand whether they all belong to similar cluster has aroused. To test that,Two step cluster analysis was performed using SPSS and the findings given below

Variables used

Age, Gender, Education, Marital Status, Occupation, Annual Income, Smart Phone Tenure, Social Media Account

Method used: Two step cluster analysis was used to consider the variables as they are categorical.

Number of clusters identified: 5

Cluster quality: Fair (Silhouette measure of cohesion and separation)

Table 8 Number of cases in each cluster

Cluster Number	Number of cases	Size
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1	30	19.6%
2	20	13.1%
3	41	26.8%
4	31	20.3%
5	31	20.3%

Findings of Cluster Analysis

The rationale behind using the cluster analysis is validate whether the sentiments of the customers remain same for all diverge groups or it is significantly different.

Cluster Number: 1

Distinguishing Features of Cluster No.1

Middle level annual income andwith age group predominately between 25 and 39. Longestsmartphone tenure, suggesting heavier mobile users.Overrepresented by males, potentially professionals or entrepreneurs with most of them are graduates.

Cluster Number: 2

Distinguishing Features of Cluster No.2

Almost all individuals are married, with high age group.High annual income and balanced smartphone usage. Almost half of them with higher qualification (M.Phil/Ph.D)

Cluster Number: 3

Distinguishing Features of Cluster No.3

Lower education compared to other clusters but overrepresented in professional roles. Thiscreates an interesting contrast.Lower income than most of the other clusters, despite being inprivate occupation.All individuals are unmarried and use social media.

Cluster Number: 4

Distinguishing Features of Cluster No.4

Middle level educationand overrepresented by female. Smart phone tenure is more than most of the other clusters and is part of middle level income group.

Cluster Number: 5

Distinguishing Features of Cluster No.5

Lowest age group among all other clusters with complete representation from the age group of 15-24. Annual income is lowest among all and more than 97% are very active in social media. Female representation is dominant in this group with 67%

To analyze the impact of the five distinct clusters on the dependent variable and evaluate whether the impact is the same across all clusters, theKruskal-Wallis H testwas used ,which is an non-parametric and an alternative to Anova. It is appropriate to useKruskal-Wallis H test as the data is non-normal and has unequal variances across clusters.

Table 9 Kruskal Wallis testfor identified Clusters

Test Type	Rewards encourage me to use a mobile wallet.
Kruskal Wallis Test	
Chi-Square	8.383
df	4
Asymp. Sig.	.079
Hypothesis Results	.079 > 0.05 (H0 is not rejected)

The Chi-Square value of 8.383 indicates some variation in responses across the five clusters regarding how much rewards encourage mobile wallet usage. However, the Asymptotic Significance (p-value) of 0.079 is greater than the commonly used significance level of 0.05. This means we fail to reject the null hypothesis of no statistically significant difference between the for this variable.

In simpler terms, while there might be some differences in how rewards influence mobile wallet usage across the clusters, these differences are not statistically significant at the 5% level based on this test.

Implications to Practice

The current study highlights the need for effective reward system. The present reward system is not encouraging the customers to transact completely on mobile payments. The rewards are neither attractive nor beneficial to the customers hence not motivating them to switch completely to mobile payments. The options are very limited and aligned with the customer preferences. Generic rewards across all customers ignore individual preferences, making them less appealing.

The mobile payment companies need to identify the needs of the customers before launching new reward schemes and offers. They should try to make rewards more attractive to increase customer engagement.

Conclusion

Mobile payments are extremely becoming popular among users. While there are a variety of reasons for its popularity, this work studies the importance of rewards and offers in particular for the acceptance of mobile payments. The findings of this study indicate that motivation towards rewards was common among all its users regardless of demographic factors. Motivation towards rewards are similar in groups of gender, age, and education, and no significant differences were found. The dependent variable "Rewards encourage me to use a mobile wallet" has a median value of 3 which indicates there is mixed feeling about rewards among users. Although mobile wallet companies are providing various rewards and offers, the customers are neither satisfied and nor dissatisfied and in the state of mixed feelings.

Cluster analysis has strengthened this finding and therefore it can be concluded that rewards are not playing a decisive role on the acceptance of mobile wallets although it was considered by users as one of the factor for its acceptance. Customers are not completely excited with the rewards, and reasons behind this can be studied further to enhance the stock of knowledge on the topic.

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