

E-Wallet Market in India and to Identify Various Factors Affecting Customer Preference

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ABSTRACT

In today's world we come across so many different modes of payments and one of the most commonly used medium is E-wallet which is used by almost everyone around us. There are many E-wallets available in the market like Paytm, Google Pay etc. which are very common among people. These E-wallets are a very convenient mode of payment making life easier for us. This research paper seeks to find out the impact of different E-wallets and study the consumer preference for the same among a group of a sample of 200 around us. The various factors are studied which are dependent on independent factors which have significant effect on E-wallets. Techniques like 2 sample T-tests and graphs/tables are used in the analysis of the primary data collected. As observed and supported by data it was established that E-wallets are affected by different consumer preferences depending on various factors.

Keywords: E- wallets, Students, Consumer Preference, Payment, Benefits and Obstacles.

INTRODUCTION:

E-wallet is a sort of electronic card which is utilized for any transactions made online using a computer or a smartphone. Its usage is the same as that of a credit or a debit card. An E-wallet must be linked with a person's bank account to make payments.

With the increase in online businesses and purchases, the procedure for making the payments is also changing, compelling it to go digital due to which people migrated from cash- based transactions to plastic cards and now finally to digital wallets or E-wallets. These transactions happen through digital channels either held on digital wallets or in the cloud, or from new advanced payment mechanisms. Since the industry is still developing a large number of names are used for such exchanges. A few examples would be e-money, digital money, micro-payments, amongst others.

In today's world these digital wallets are very popular and tomorrow there will be a direct payment system which will be done through different intermediates like mobile wallets and different companies which are dealing in plastic money in other words transactions which is cashless and which can be replaced with a hard cash notes. (Malik, Kataria, & Nandal*, 2020)

Numerous E-wallet companies such as "Paytm" and "Free Charge", work through applications in smartphones. E-Wallet permits you to store numerous credit card and bank account numbers in a safe domain and eliminate the need to enter in account information during monetary transactions. When a client registers and makes an E-Wallet profile, access to make payments will be faster without having to enter too many details every time.

PayTM saw a 4.7% increase in its valuation over the past few months. Free Charge multiplied its number of clients post demonetization and moving towards a cashless economy. All the nations over the globe are supporting the E-wallet industry as it helps keep a track of transactions and decrease the number of back money transactions. The worldwide E-wallet market is expected to grow at a CAGR of 15% and reach a market size of USD 2,100 billion by the end of the forecast period in 2023.

Why use E-Wallets?

Following are the upsides of utilizing E-wallets:

Lower Costs: E-wallets eliminate the need for intermediaries. Cashiers are no longer required at stores as the transactions can simply be done by a single tap on the smartphone or by simply scanning it. Transaction cost for businesses is reduced.

Competitive Advantage: E-wallet applications make monetary transactions easier and more convenient. As a result, businesses that use these payment methods have a competitive advantage over the rest as it adds to the entire consumer experience.

Modern: Traditional businesses which earlier only accepted cash payments, are now open to payments by credit cards and debit cards, thus opening a whole new avenue for traditional businesses to explore, and thus improve their reach and expand their market multifold.

Convenience: Monetary transactions become easier. Clients no longer need to stand in long queues at stores to make payments, thus making the entire purchasing experience more satisfactory and stress free. Clients can also make payments from the comfort of their homes.

LITERATURE REVIEW:

[T. Praiseye, Dr. Florence John, et al.,] Technology today has come a long way as smartphones can now be used for making payments through secure servers and platforms. One isn't required to put in their account details every time as they are stored by the companies in a secure environment. Today they are used by several companies, banks and customers. Initially slow to pick up, in the post demonetization era, there has been a huge rise in not just the number of e wallet platforms but also a surge in the customer base for these e wallets. The frequency analysis suggests that 49% of the sample population was sceptical about privacy issues although they believed that the data was secure. Security maintenance wasn't a major factor affecting consumer preferences. Ease of using, convenience, service fee, loyalty all played a significant role in consumer choice as in each case at least 50% of the sample believed these to be extremely crucial to their choice.

[Hem Shwetha Rathore, et al., 2017] has conducted the study to analyze the perspective of youth towards a switch to E wallet and the strategies adopted by E wallet firms in keeping their user base consistent. According to the survey of the author it was noted that two-third of the youth mainly use E wallets for online transactions, recharges, booking tickets etc. and because of demonetization an alternate payment mode was required and E wallets utilised this opportunity. Most of the respondents agree to the fact that E wallets are now being accepted in small vendors to large scale retailers and also that the availability of cash backs, redeem points and loyalty services provided by E wallet firms, gives them the opportunity to select the best of the available ones. To conclude the author believes that in order to maintain and strengthen the user base, E wallets firms compete themselves with other firms on providing quality service and providing its customers with a wide range of monetary benefits with technical advantages as well as the confidentiality and security during the payments.

[Bhagyashripachpande et-al 2017] states that E-Wallet is one of those programs which are a real pleasure to use and it has been so well thought out. There are a host of features and the program remains so very simple to use. Consumers can ignore all the customization and use it just as effectively with the default settings and selections. Though there are many problems related with e wallets like security issues still it remains the best transaction application as compared to others. The three major things related to the success of e wallets are ease of use, quick online transaction and usefulness of e wallet. E wallet is performing well in terms of transaction time, discounts, offers and customer satisfaction.

[Rana, et al., 2017] This research was basically based on primary data collected using a structured questionnaire administered to 100 respondents during a period of 1 month. Small amount of secondary data collected from various sources was also used. Collected data was analysed using SPSS software by using statistical tools like descriptive statistics, pie chart, χ^2 test etc. Majority of the respondents prefer to use a mobile wallet for doing recharge (23.15%) followed by paying bills (16.84%) and transferring money (15.78%). Queue avoidance, time and place independent purchase and instant payments are the three important factors for the students to opt for mobile wallets. 44% of the respondents strongly agree that they prefer to use other cashless payments methods also, 31.57% strongly agree that they are concerned about the safety. 40% of them disagree that cost of data access is high and the same percentage (40%) of them have no problem in trusting the online merchant and intermediaries.

[Priyanka Jain et-al 2019] provides a systematic review of literature on digital banking adoption published from Jan 2005-2018. The 100 relevant studies appear in 53 journals and represent a reasonably deep view in the field of digital banking acceptance research. Different models, theories and frameworks are used to study different attributes, constructs and various factors that promote the adoption of digital banking and risk associated with its usage. The research paper shows that the consumption of wireless banking will increase immensely and the target audience is the youth. The reason for this is the youth adopts technology faster. The literature on mobile banking or digital banking is lacking the study on varied age groups or professions [11-15]. The relationship between e-payment, e-banking and m-banking is still not clear.

RESEARCH PROBLEM:

To understand the E-Wallet market in India and identify various factors affecting customer preference.

RESEARCH METHODOLOGY:

The study makes use of both primary data and secondary data which was collected to generate insights about the factors affecting consumer preferences.

Primary data was collected from a convenience sampling survey sent out through Google Forms. The responses from each respondent were recorded and classified on an appropriate basis to generate insights.

Secondary data collected was collected from journals, magazines and websites.

The statistical tools used for analysis are Hypothesis Testing involving t- tests and Excel statistics.

RESEARCH DESIGN:

A. Research Objectives

The focus of this research is to identify the trends in the newly rising Ewallet industry and find reasons that affect the usage pattern of the consumers.

- 1) To understand the E-wallet market in India and its growth in India in recent years.
- 2) To identify and understand factors affecting choice of E-wallet and its consumer preferences.
- 3) To conduct a comparative study of prominent E-wallets in India.

B.Hypothesis

H1: E-wallets are used more by people under the age of 35.

H2: Safety and privacy significantly affect the consumer preference of E-wallet.

H3: Peer influence significantly affects the consumer preference for E-wallets.

H4: Offers and benefits given by the company significantly affect the consumer's preference.

H5: Convenience and availability at locations significantly affects the consumer choice for e-wallets.

H6: People feel E-wallets are a safe, secure and easy way to transact.

C. Variables Under Study

C.1. Independent Variables

Safety, Security and Privacy	Sensitive data is safe with the company and there is no misuse of data. Transactions can take place safely.
Peer Influence	People use a particular E-wallet as a result of their friends or family using it or insisting to use it.
Offers and Benefits	Discounts and cashback offers given by the companies on transactions.
Convenience and Availability	The ease of completing transactions and the option to pay using an E-wallet at shops, restaurants etc.(both online and offline)

C.2. Dependent Variables

Consumer Preferences	Consumer preferences are choosing one brand over another due to presence or absence of certain factors they consider important.
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D. Research Design

- 1) An **exploratory research** was conducted in the form of secondary data analysis to get insights into the new market of E-wallets in India and the prominent market players. External data sources like published documents and articles were used to collect information about usage patterns and growth of the industry.
- 2) A **descriptive multi-cross-sectional** study was conducted for research purposes. People of various age groups were requested to take part in a survey to get a more holistic view of the

current status of the E-wallet industry and to identify which factors play a key role in the consumer decision for preferred E-wallet.

- 3) Survey method was used by sending out a questionnaire to people of various age groups, which was circulated online. The sample analysis was used to study the awareness, factors and opinions of people about E-wallets.

E. Sample Selection

- 1) To collect the data, the Quota Convenience Sampling method was used.
- 2) Sample of 200 people was collected for the survey.
- 3) Sample collected was on the basis of age and occupation.

F. Data Collection

- 1) An online questionnaire was used to gain the understanding and opinions of individuals in urban areas on their awareness and usage of E-wallets as it was the most effective and convenient manner to reach the respondents.
- 2) The questions were varied and formulated to analyze how age and occupation affect the perception and usage of e-wallets.
- 3) The questions were designed to be objective and avoid any biases.

4. DATA ANALYSIS

A. Secondary Data Analysis

E- wallets first came to India in 2006. Wallets365 was introduced by the times group in collaboration with YES Bank. Although they did not gain much popularity, E-wallets have come a long way since then. As of 2018, the Indian E- wallet market was valued to be around \$16bn in 2018 and grow to about \$184bn in 2024 with a CAGR of almost 40-50%. Today there are a number of players in this industry.

They have been joined by banks, NBFCs, e-commerce companies like Amazon, Flipkart, Grofers etc. Some recognized the growth potential before others and grew faster. They took the first mover advantage as they cornered a large chunk of the market. PayTM, PhonePe and Google Pay are market leaders with almost 90% of the market share.

Demonetisation in November of 2016 was a blessing in disguise for this industry. As the country suffered a liquidity crisis and cash crunch, these companies took the opportunity to rise to prominence. In the pre demonetisation era, in 2015-16, the industry was valued merely at about \$21 million. This same industry in 2018 was valued at more than \$15bn. Such was the impact of demonetisation. It gave these companies a platform to stand up and rise from. During these years a number of other favourable factors came into play which gave the perfect setting for a massive boom in the industry.

The spurt of growth in the e-wallet industry can be majorly attributed to the actively growing user base of smartphones. The number of people using smartphones is increasing rapidly and this has increased the penetration in the country. To add to that with Reliance jio, the data tariffs have become so low and competitive that almost everyone has access to the internet today in the country. Moreover, various ecommerce companies are now increasingly accepting mobile wallets for convenience of their customers, which is positively influencing the country's mobile wallet market.

The govt too has been encouraging and promoting the use of e wallets through its platform called BHIM UPI. UPI is available as a service with all major banks and now all major e-wallet companies as well. The UPI platform in particular has witnessed phenomenal growth. It is one of the fastest-growing digital payments products across the world. It was introduced in 2016 by the NPCI (National Payments Corporation of India) to bring digital payments under one umbrella. It has a user base of more than 100 million. From 2018 to 2019, it has witnessed a growth of 187%, having a total of 10.8 billion transactions

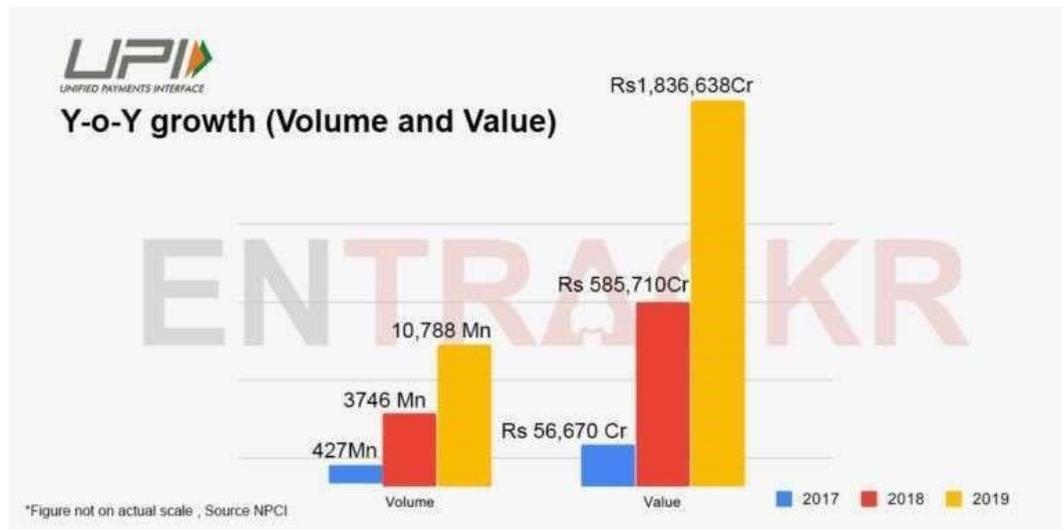


Fig. 4.1 - YOY growth of UPI payments in India

RBI stepped in as a regulator for this now booming industry. In 2018, the net-worth requirement for digital wallet companies were hiked to Rs5 crore from Rs2 crore, with a minimum positive net worth of Rs15 crore in three financial years. This made the entry barrier tougher and, therefore, only serious players are staying back, unlike previous times when companies were just acquiring the licence but not even using it. Furthermore, the KYC norms were made more stringent for all e-wallet holders. To give a boost to this upcoming sector, the RBI allowed interoperability which allows money transfer between two firms. Apart from this, mobile wallet companies can also now issue cards in partnership with payment networks like Mastercard, Visa, or RuPay.

To summarize in a line, it can safely be said that the growth of this industry has been due to widespread accessibility to smartphones and internet, combined with government initiatives taken to promote ewallets.

B. Quantitative Analysis

The research was conducted to understand the consumer awareness and usage patterns of Ewallets, factors affecting their choice, and their opinion on use of E-wallets.

1) Descriptive Demographic Analysis

Gender	Frequency	Percentage
Female	100	50
Male	99	49.5
Prefer not to say	1	0.5
Grand Total	200	100

Table 4.1.1 – Proportion of male and female in total sample

The sample consisted of an equal proportion of male and female respondents for the purpose of this survey.

Age Group	Frequency	Percentage
<15	1	0.5
15-25	98	49
26-35	38	19
36-45	40	20
45+	23	11.5

Table 4.1.2 – Frequency of age group of the sample

A fairly diverse sample was collected in terms of age groups. From the data collected from 200 respondents, almost 50% of the sample consisted of youngsters in the age group of 15-25 years. The second highest tally is people of the age group of 36-45 years. This is closely followed by 38 respondents

Occupation	Frequency	Percentage
Business	31	15.5
Students	99	49.5
Professionals	38	19
Teachers	14	7
Housewife	9	4.5
Service	9	4.5
Total	200	100

in the age group of 26-35 years. Age group of 45+ years made up 11.5% of the sample for this survey.

Table 4.1.3 – Occupation

On the basis of occupation, almost 50% of the sample consisted of students. This is consistent with the sample size of the age category of 15-25 years of age. The second highest respondents were working professionals which made up 19% of the data collected. 15% of the data collected was from those who ran a business and the remaining 16% of the data was collected from housewives, teachers and other

service jobs. This was done to understand whether occupation plays a role in the frequency and preference to use of e-wallets

2) Descriptive Analysis on consumer knowledge and preference

The following two charts show the prominent E-wallets in our country.

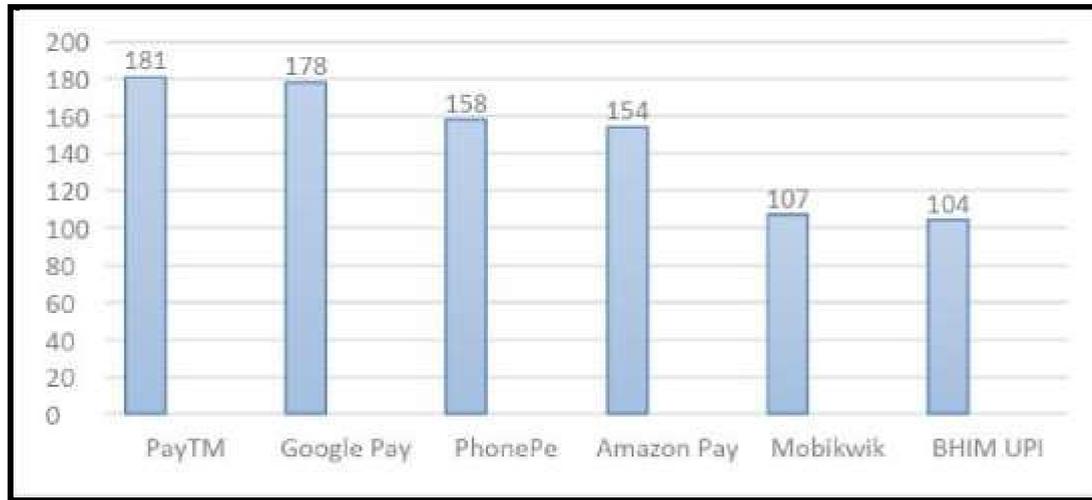


Fig. 4.2.1 – Awareness of popular E-wallets

Fig 4.2.1 shows the brand recall the sample had towards these wallets. Of 200 respondents, about 90% people had heard of PayTM and Google Pay, almost 80% people were familiar with PhonePe and Amazon Pay. The numbers started declining beyond that as only about 55% people had heard of Mobikwik and BHIM UPI. This data corresponds with the actual data which shows that PayTM, GooglePay and PhonePe are the biggest players in the market- having a market share of almost 85-90%. However, it seems like from the data that people are unaware of the fact that all these platforms offer the service of transactions via UPI; else the numbers for UPI should've been much higher. Only about 10% people were unfamiliar with any of these e-wallets

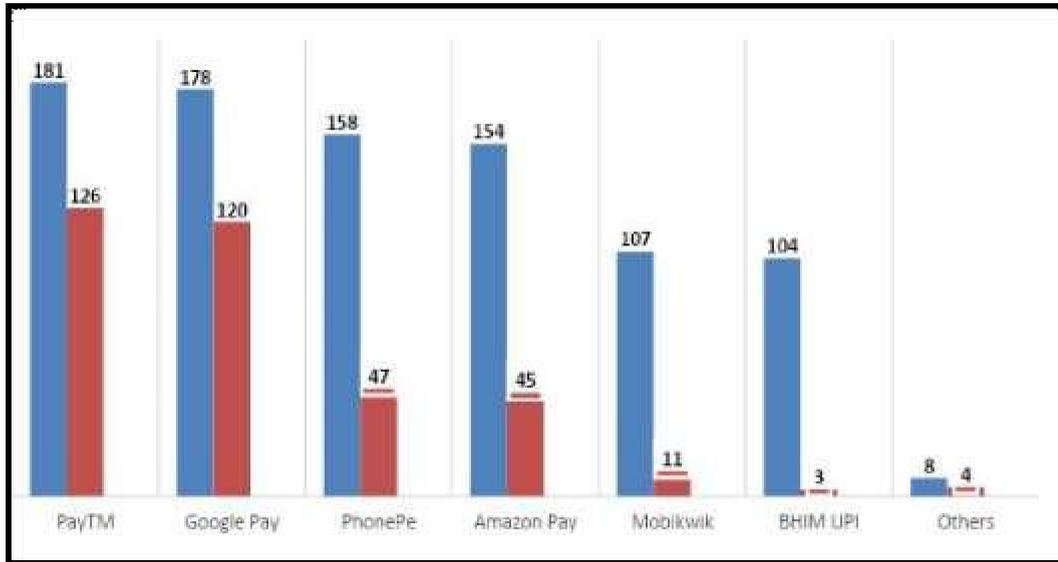


Fig. 4.2.2 - No. of people using E-wallet

Fig 4.2.2 shows the number of people who use e-wallets compared to those who have heard of it. PayTM and GooglePay have higher conversion rates of customers with about 68%. The conversion rate rapidly decreases for PhonePe and Amazon Pay. Only 29% of people who are familiar with these companies use them. Others still prefer their competitors. Even though more than 50% people are aware of the UPI platform and BHIM UPI, less than 2% actually use BHIM. They prefer using the UPI facility through other applications, namely PhonePe and GooglePay.

3) Factors affecting consumer preferences.

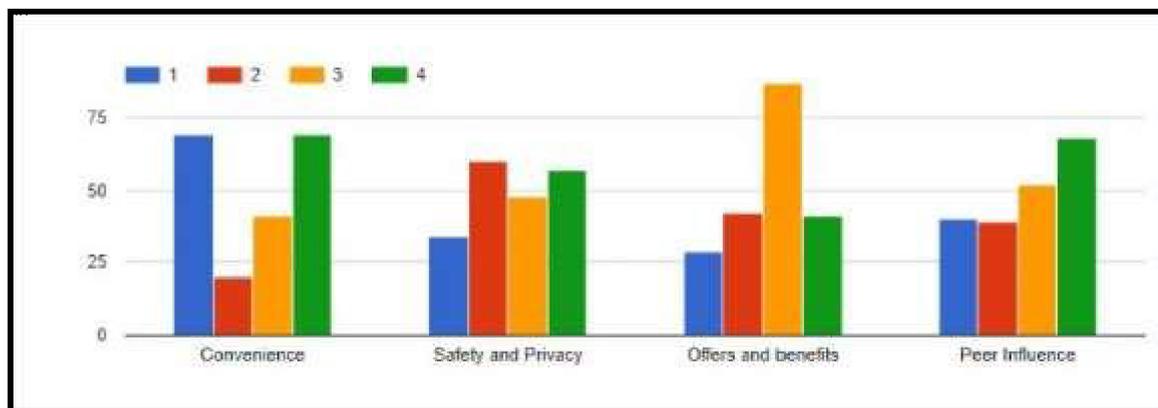


Fig 4.3.1 – Factors affecting consumer preferences

The above chart shows which factors affect the consumer preferences the most. The factors have been scored by respondents on a scale of 1-4.

Convenience has the most divided opinion amongst consumers where 69 people have given it a score of 4 and 69 people have given it a score of 1. Across all age categories, convenience has an average score of 2.55. For more people, convenience plays an important role in selection.

Safety and Privacy has been given a score of 4 by 57 consumers and a score of 3 by 48 consumers. This means a few more than 50% consumers feel that safety and privacy would change their choice of e-wallet. Across all age groups, it has an average score of 2.64.

Offers and benefits seem to affect the choice of most consumers. 41 consumers give it a score of 4 and 87 consumers give it a score of 3. More than 60% consumers would change their preferred e-wallet for better offers and benefits. The average score across all ages is 2.7

Peer influence seems to be the second most important factor affecting choice as it has 68 consumers giving it a score of 4 and 52 consumers giving it a score of 3. This is 60% of the respondents. The average score is highest with a score of 2.7.4

FACTORS	<15	15-25 (%)	26-35 (%)	36-45 (%)	45+ (%)	Total (%)
Convenience	30.7	26.24	20.39	21.20	23	23.98
Safety and privacy	23.07	25	23.42	25.69	24.88	24.83
Offers and Benefit	30.7	24.02	27.55	28.68	26,29	25.78
Peer Influence	15.53	24.74	28.65	24.44	25.82	25.4
%	100%	100%	100%	100%	100%	100%

Table 4.3.1 – Factors affecting choice as per age category (%)

This data suggests that for people in the age category of 15-25 look at convenience as the most important factor while using an e-wallet. This changes for people in the age category of 26-35 whose choice of ewallet is affected as a result of peer influence. The age groups from 36-45 and 45+, both consider offers and benefits as the main factor affecting the choice of their e-wallets.

The table shows that factors most affecting the age categories is as follows-

15-25: Convenience>safety and privacy>peer influence>offers and benefits

26-35: Peer influence>offers and benefits>safety and privacy>convenience

36-45: Offers and Benefits>safety and privacy>peer influence>convenience

45+: Offers and benefits.> peer influence>safety and privacy> convenience

	Availability at more places	Ease of use	Connectivity	Privacy	Reliability	Security
Extremely important	129	74	75	108	87	117
Important	40	80	60	39	45	35
Neutral	14	23	37	33	31	25
Unimportant	5	8	13	8	20	11

Extremely unimportant	3	5	5	3	4	3
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Table 4.3.2 - Importance of factors affecting the choice of e-wallets.

This above table shows the importance of various factors in the choice of e-wallets. According to the data majority of people find Availability, privacy and Security as most important factors followed by Ease of use, Connectivity and Reliability as some people are pretty neutral when it comes to Reliability and connectivity.

4) Usage pattern of e wallets

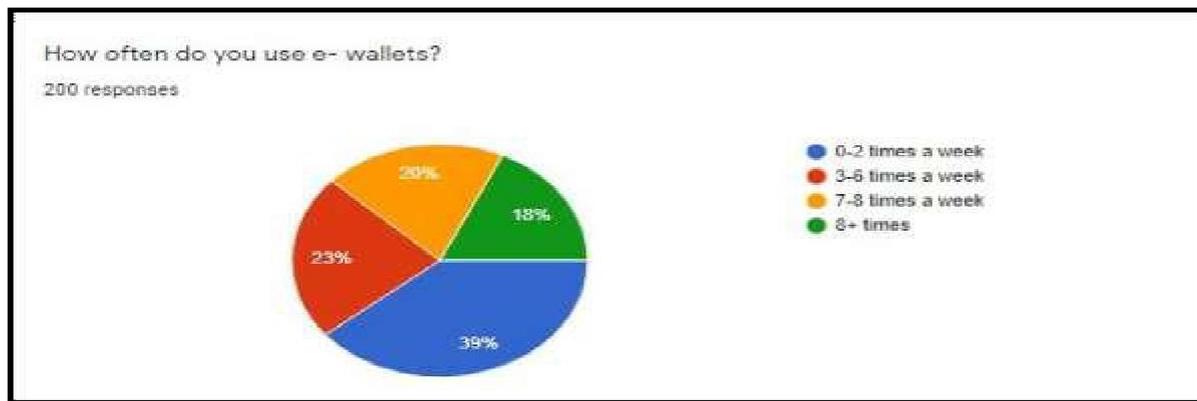


Fig 4.4.1 - Frequency of usage of e-wallets

Age Category	0-2 times a week	3-6 times a week	7-8 times a week	8+ times	Grand Total
<15	1				1
15-25	51	16	12	19	98
26-35	5	10	13	10	38
36-45	13	13	10	4	40
45+	8	7	5	3	23
Grand Total	78	46	40	36	200

From the chart it is evident most people use e-wallets 0-2 times a week. 23% people use e wallets 3-6 times a week and 38% people use e wallets more than 7 times. The data essentially classifies the people into two groups- those who are regular, frequent users and those who use it seldom. We can see that 61% of the people are regular users of e-wallets meaning they use it on a day to day basis for common transactions and 39% people use e-wallets infrequently meaning their use is restricted to the occasional transaction.

Table 4.4.1- Frequency of usage according to age categories

The above table shows that despite having the most number of users, people between ages 15-25 are not very frequent users of e-wallets. Their usage is restricted to 0-2 times a week. This group consists mostly of students. People of age groups 26-35 use e wallets much more frequently - 10 people use 3-6 times and 23 people use more than 7 times. Similarly, most people between ages 36-45 use e wallets up to 6 times a week. Although the ages 26-45 have a lesser absolute number of users, the frequency of the use is much higher in these two age categories. The frequency shows reducing trends in ages 45+.

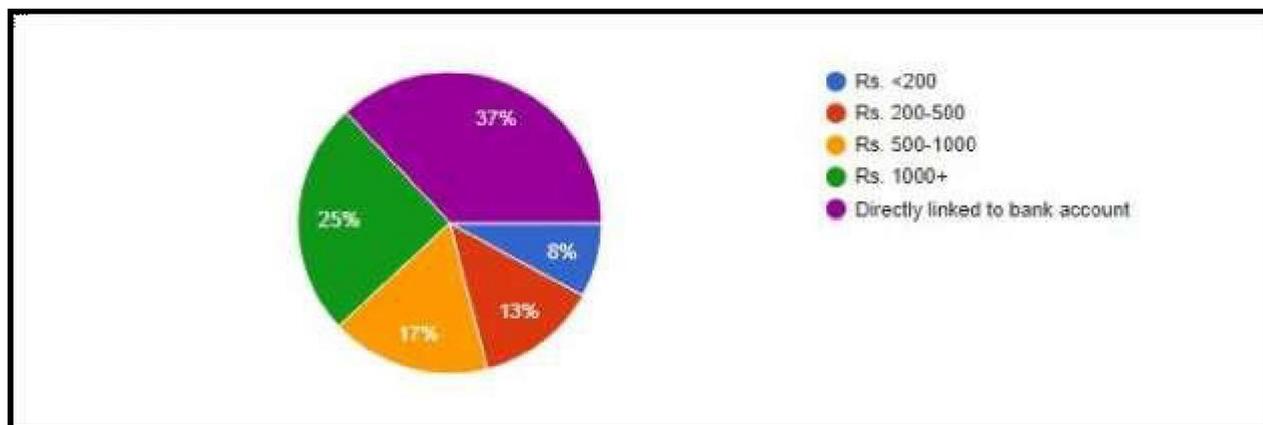


Fig 4.4.2 – Average balance in e-wallets

From the above data, it can be said that more people prefer maintaining a balance in their wallets instead of linking bank accounts. Most people prefer keeping a balance of more than Rs 1000. 17% people prefer to keep a balance between Rs. 500-1000 in their e wallets. Few people prefer keeping balances less than Rs 200. With the growing awareness of UPI, however, a lot of people have started linking their bank accounts directly to an e-wallet to avail this facility.

Age Category	Directly linked to bank account	Rs. <200	Rs. 1000+	Rs. 200-500	Rs. 500-1000
<15					1
15-25	42	9	16	16	15
26-35	19	1	9	4	5
36-45	8	3	15	4	10
45+	5	3	10	2	3
Grand Total	74	16	50	26	34

Table 4.4.2 – Balances as per age category

From table 4.4.2, it can be said that most people under age category 15-25 prefer to link their bank accounts to their e-wallets. This number keeps decreasing through increasing age group. Those who don't link their bank accounts all prefer to keep a balance of at least Rs 1000 across all age categories. Most people prefer to keep a higher balance amount. The number of people preferring to keep a low balance in e wallets in very few.

5) Non Users

Those people who don't use E-wallets are primarily because they don't feel the need for it and prefer to use other modes of transactions. For others, the primary concern is safety, security and privacy. A lot of people feel unsafe using e wallets and that is perhaps the reason they prefer using another mode of payment.

6) Future of e wallets

From the chart 4.6.1 below, it is evident that almost 80% of people believe that shopping has become easier and more convenient as a result of e-wallets. It is an indication that people are shifting to e-wallets as a mode of payment especially for online shopping. A lot of mom and pop stores have also started accepting payments using e-wallets which has added to the convenience of shoppers. However, despite the growing trend of using e-wallets, there is still skepticism regarding the safety and security of the transaction and the associated sensitive information of the users. This has created a sense of discomfort in the minds of some people causing mental discomfort in using e-wallets. However, with more awareness about e-wallets and their safety being spread by the RBI and the encouragement of the government to move towards a digital India, these numbers are likely to come down.

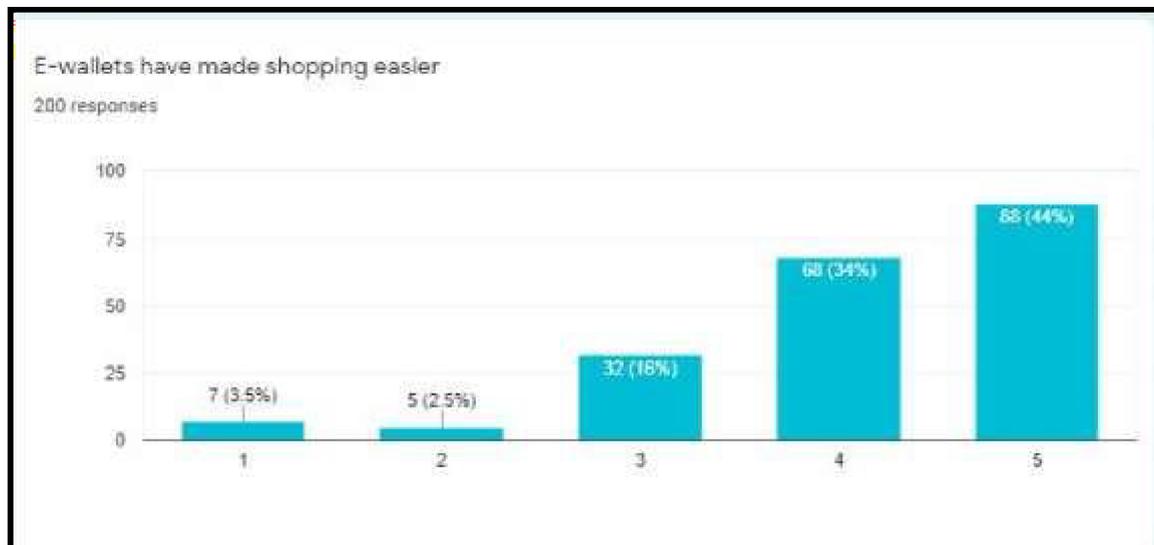


Fig 4.6.1 – Consumer opinion on e-wallets

From chart 4.6.2, it is evident that most people (79%) believe that e-wallets are a sustainable form of payment in the future as well. People believe that in the future e-wallets could become one of the primary mediums of payment and be widely accepted in small and big stores alike. Only a small portion of the population feels that e-wallets are not a sustainable form of payment and it will not be as prevalent in the future.

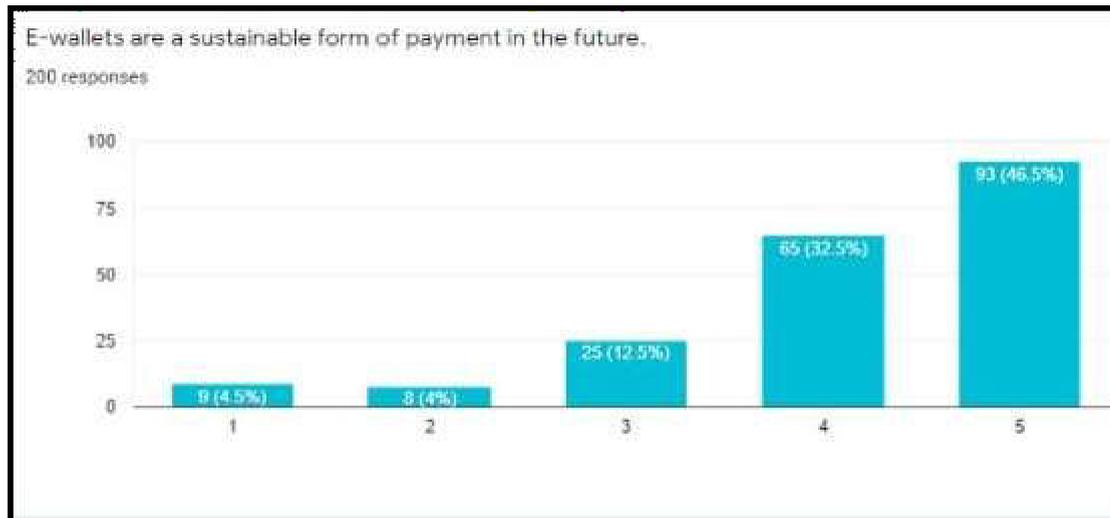


Fig 4.6.2 – Sustainability of e-wallets

FINDINGS:

After the analysis of the data received, the above research highlights the following points

- The age group which uses e-wallets the most is 15-25 (49%) whereas the age group 45+(11.5%) is the one which uses these e wallets the least.
- Despite being the most users of e-wallets being in the age of 15-25. they are also the most infrequent users. Most users of e-wallets are people in the age groups of 25-45 years of age.
- Occupation wise e-wallets are mainly popular amongst students of which undergraduates use e-wallets the most, and after undergraduates it is common amongst graduates. This is followed by users who are working professionals and businessmen.
- The survey showed that the e-wallet which is most heard of is paytm. According to the survey 90.5% of our sample space have heard about paytm and 63% of them use it, the e-wallet which is popular and is used the most after paytm is Google pay. Google Pay which uses UPI as its platform has risen to significance quickly and gives PayTM stiff competition.
- The people who don't use e-wallets, 48% of them said that they don't feel the need to use it, and another major reason for them not using e-wallets is safety and security.

LIMITATIONS:

1. The Sample Size for our survey was around 200. If the sample size would have been larger than the result generated could be more accurate.

2. Since we don't have experience in primary data collection, there is a great chance that the nature of execution of data collection methods is flawed.
3. The Hawthorne effect was also a problem for our study.
4. More in-depth comparative studies can be conducted on different cashless payment options.
5. Due to lack of experience, the scope and deepness of discussions in the paper may be compromised compared to the works of qualified scholars.

CONCLUSION:

The users of mobile wallets are much satisfied with its usage. E wallets are becoming more widely accessible, as well as acceptable as a „normal“ means of payment. The top three features that a person keeps in mind while choosing an e-wallet is availability at more locations, security and privacy and convenience. Offers and benefits are one of the major points which affects a customer's preference towards an e-wallet followed by covalence and peer influence.

Bill payments and recharge, food and online shopping are the major reasons why a person uses ewallets. Another key usage of e-wallets amongst the youth is to transfer money to peers and split bills in a peer circle.

Majority of the respondents felt that e-wallets are a sustainable mode of payments in the near future. However they still believe that it would not replace cash transactions altogether.

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