

# **CHAPTER-3**

# **RESEARCH**

# **METHODOLOGY**

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### **3.1: Overview**

Research methodology and design covered in this chapter are used to perform both types of research, i.e. Primary and Secondary research. It comprises statistical data, the research strategy, methods or techniques used, and the hypotheses made. It talks about the structure of the questionnaire and the information gathered about Plastic Money and Virtual Wallet. The survey investigated an uncharted territory by contrasting consumers of Plastic Money and Virtual Wallets. During the survey, an understanding of cardholder circumstances, services and safety precautions was determined. Another essential aspect that will aid in expanding the various digital payments and user-provided assistance are the widespread use of cards and wallets.

Additional advantages of cards include ease of shopping, access to loans, bill payment, etc via credit and debit, safety, and record-keeping. Although Paytm and Google Pay have increased acceptance at numerous outlets, mobile wallet payments are now only partially accepted at retail establishments. To accurately examine the effectiveness of wallets on payment processing. However, the broad adoption of wallets is still necessary. Given the constraints of the technology, the work contributes to successfully collecting the data frame.

### **3.2: Significance of the study**

This research is significant for consumers who prefer to use various types of plastic money and virtual wallet assistance. It is important to recognize the young consumers' awareness of plastic money and virtual wallet payment systems. The study shows that young consumers are delighted with the amenities offered by plastic money and virtual wallets.

The study also helps to evaluate the impact of demonetization on plastic money and virtual wallets. The study helps find areas such as payments and virtual wallets, which are seeing rapid progress and innovation so that Banks or other institutions can invest in them and develop new products. The study explores the benefits and challenges of using advanced features for plastic money and virtual wallets. Apart from this, findings help to generate successful ideas for business for poor and deprecated sections of society. The overall purpose should help create awareness and increase the circulation of cards and digital wallets in India. This will result in to a cashless society.

**3.3 Problem Statement:** The advancement in study remains closely related to gathering, analyzing, and evaluating data. Researchers frequently need help to locate the data they need;

instead, they need to understand where to seek it, how to analyze it, and what happens when they do so. Every study has the challenge of locating resources for data and creating original techniques for analyzing them. An effort is made to respond to the following issues as the data-collecting phase begins:

1. Which kind of data is required for the study?
2. Where can I find the data I need, and what kinds of sources are there?
3. What kind of form of data do I need?
4. To what extent is this data necessary for the study?

In light of the questions mentioned above, a questionnaire was created, and demographic variables influencing how plastic money and digital wallets are used were investigated by including inquiries about age, gender, city, level of education, profession, marital status, monthly family income, etc. Along with personal inquiries, I would like to figure out whether these variables could affect how plastic money and digital wallets are used. The user's inclination for using plastic money and digital wallets is verified by determining the preferred location. Questions on plastic money and digital wallets on a Likert scale are used to analyze user satisfaction with cost, security, awareness, convenience, social impact, government policies, etc. To examine the relationship between perceived usefulness and ease of use, ease of use and attitude toward utilizing, and attitude and behavioral intention to use plastic money and digital wallets, Questions on a Likert scale have been included in the questionnaire. Technology Acceptance Model, designed to identify the elements contributing to user adoption of emerging technologies, accepts these variables. Therefore, this research was carried out using research problem of **“A Study of Young Consumers’ Perception, Attitude and Behavioral Intention towards Usage of Plastic Money and Virtual Wallet as Modes of Payments in Selected Cities of Gujarat.”**

### 3.4 Research Objectives

Table 3.1 List of Research Objectives

Sr. No.	Research Objective
<b>Primary Objective</b>	
1	To understand young Consumers’ Perceptions, Attitudes, and Behavioral Intentions towards the Usage of Plastic Money and Virtual Wallet as Modes of Payment in Selected Cities of Gujarat

### Secondary Objectives

- 1 To know more about Plastic Money and Digital Wallet services in India
- 2 To study the level of Awareness and usage of Plastic Money and Digital Wallet among Young Consumers
- 3 To find out the most influencing factor among the factors that influence the customer's (Youth) adoption of Plastic Money and Digital Wallet in selected cities of Gujarat
- 4 To find the relationship between demographic factors of the respondents and usage of Plastic Money and Digital Wallet
- 5 To determine the factors of the Technology Acceptance Model that influence the use of Plastic Money and Digital Wallet
- 6 To analyze, interpret and measure the effect of demonetization on Plastic Money and Digital Wallet

### 3.5: Research Design and Data Collection

Ahmedabad, Surat, Vadodara, and Rajkot were the largest cities of Gujarat where the primary research survey was conducted. The survey respondents were split into two groups: those who used Plastic Money and those who used Virtual Wallets. Different types of young consumers made the payments, including business people, private or public sector employees, students, and housewives. The survey was split into two portions, one asking questions about Plastic Money and the other about Virtual Wallets. Subjective and objective questions were used to collect demographic information and the replies. Nominal, ordinal, and five-point Likert scale information were gathered.

### 3.6: Sampling Plan:

**3.6.1 Sampling Frame/Represent** young customers (The UN, for statistical consistency, defines 'youth' as those persons age between 18 to 34 years in the Indian context) of selected cities who use plastic money and digital wallets have been selected.

#### 3.6.2 Sample Size-

The formula used to determine sample size:

$$n = p (1 - p) z^2 / e^2$$

n= required sample size

p = the estimated population proportion (based on the researcher's judgment and estimate that 30 per cent (0.30) of the target population uses plastic money and digital wallets)

z = suppose the level of confidence is 95 percent (associated z value is 1.96)

e= Margin of error (5%) = + or - 0.05.

#### Computation of Sample Size:

$$n = \frac{0.30 (1 - 0.30) (1.96)^2}{(0.05)^2}$$

$$n = \frac{0.3 (0.7) (3.8416)}{0.0025}$$

$$n = \frac{0.8067}{0.0025}$$

n = 322.69, so the sample size is **330 (Rounded off)**

Based on a sample size of 330, considering four selected cities as four strata, the total sample size can be determined as (i.e.  $330 \times 4 = 1320$ ).

The total number of samples for four cities is presented in the table below. Because the population sizes differ between the four cities, the Stratified Random Sampling method (Proportional Allocation) is utilized, and the sample distribution has been determined city-wise as follows.

**Stratified Random Sampling (Proportional Allocation):**  $n_i = \frac{n N_i}{N}$

Where  $i = 1,2,3,4$

n = Total sample size (1320)

$n_1, n_2, n_3$  and  $n_4$  = required total sample size for each group (Ahmedabad, Surat, Vadodara, Rajkot)

$N_1, N_2, N_3$  and  $N_4$  = Size of population for each group (Ahmedabad, Surat, Vadodara, Rajkot)

N = total population of all four groups

By applying the formula, the sample size is calculated as follows: (Figures rounded off)

$$n_1 (\text{Ahmedabad}) = (1320 \times 243099) / 583544$$

$$n_1 = 475 \text{ Sample size for Ahmedabad}$$

**Table 3.2 City Wise Distribution of Sample Size for calculating Total Sample Size**

Sr. No.	City	*Population	**Penetration of plastic money digital wallets (3%)	Sample size (Rounded Off)
1	Ahmedabad	81,03,314	2,43,099	550
2	Surat	72,57,535	2,17,726	493 ~ 495
3	Vadodara	21,99,562	65,987	149 ~ 150
4	Rajkot	18,91,061	56,732	128 ~ 130
<b>Total</b>		1,94,51,472	<b>5,83,544</b>	<b>1325</b>

\*<https://populationstat.com/india/>, Accessed on 24/09/2020

\*\* <https://www.kenresearch.com/banking-financial-services-and-insurance/financial-services/cards-payments-market/222797-93.html#details>

\*\* <https://www.kenresearch.com/banking-financial-services-and-insurance/financial-services/mobile-wallet-market/341252-93.html>

\*\* <https://indiaincgroup.com/?s=digital+wallets>

The sample size for this research was calculated by approximating a population proportion because the population standard deviation is not available (Levin & Rubin, 2003, pp. 379–382). Since a 95% significance level was used, an estimate of within 0.05 is expected. The sample size is around 1330. Of these, 550 were selected from Ahmedabad, 150 from Vadodara, 130 from Rajkot, and 500 from Surat for parts A (Plastic Money) and B (Digital Wallet).

**3.6.3 Sampling Procedure** -The researcher used a convenient sampling technique in phases and multistage sampling. The non-probability convenient random sampling technique, depending upon the surveyor's opinion, has been utilized to collect data.

**3.7 Sources of Data**- Data were collected from both primary and secondary sources. Primary data were gathered from major cities in Gujarat, such as Ahmedabad, Surat, Vadodara, and Rajkot. The users of both Plastic Money and Virtual Wallets were targeted for the collection of primary data. The primary data source for this research was two distinct questionnaires that were used to collect information about plastic money and virtual wallets. The survey aimed to gather data on how people use and perceive their wallets and cards.

Finally, it also examined how users felt about using cards and wallets before and after demonetization. A pilot survey was conducted by utilizing a series of questionnaires. The Technology Acceptance Model also assesses user perceptions of ease of use, usefulness, attitude, and behavioral intentions related to using Plastic Money and Virtual Wallet. Data from primary sources were collected to determine the variables that would affect the usage of Plastic Money and Virtual Wallet. The questionnaire is well-structured and begins with questions on their usage and opinions about plastic money and digital wallets. Then, information about the user's demographic details was gathered. After considering the content of many studies and works of literature, the questionnaire was created. The central concept was to reveal customer usage and preferences using data collection.

### 3.8 Research Approach- Survey Approach

#### 3.8.1 Research Instrument- Structured Questionnaire

**3.8.2 Questionnaire:** The study's questionnaire has two parts: Plastic Money and Digital Wallets. A similar set of questions is asked to enable a comparison analysis of each. The perception of utilization is examined in terms of use, risk, convenience, and security.

**Table 3.3 Part A. Plastic Money**

Questionnaire	Empirical Support (question number) with Source	Test Applied
<p>1. Have you used Plastic Money? (Debit cards and Credit cards)?</p> <p>2. Which of the following types of Plastic Money have you used?</p>	<p>The researcher developed these items.</p>	<p>Frequency table Chi-Square</p>
<p>3. Show your level of awareness about the usage of Plastic Money</p> <p>4. Which of the following bank debit cards do you possess?</p>	<p>The researcher developed Q No 4 and 5.</p>	<p>Frequency table, Mean, Median and Mode Analysis</p>

<p>5. Which of the following banks' Credit cards do you possess?</p> <p>6. Is the procedure for applying for a credit card simple?</p> <p>7. Since how long have you been using Plastic Money?</p> <p>8. How frequently have you been using Plastic Money?</p>	<p>(Hugar, 2016) (Q No 3, 6, 7 and 8)</p>	<p>Chi-Square</p>																
<p>9. Which among the following factors influenced you in the adoption of Plastic Money</p> <table border="1" data-bbox="264 600 868 1115"> <thead> <tr> <th>Factor</th> <th>Rank</th> </tr> </thead> <tbody> <tr> <td>Security and Privacy</td> <td></td> </tr> <tr> <td>Convenience (Anytime Anywhere)</td> <td></td> </tr> <tr> <td>Rewards and Cashback</td> <td></td> </tr> <tr> <td>Symbol of high Socio-Economic status</td> <td></td> </tr> <tr> <td>Alleviate cash Shortages</td> <td></td> </tr> <tr> <td>Due to the Duplicity of Paper money</td> <td></td> </tr> <tr> <td>Less Annual Fees/Cost</td> <td></td> </tr> </tbody> </table>	Factor	Rank	Security and Privacy		Convenience (Anytime Anywhere)		Rewards and Cashback		Symbol of high Socio-Economic status		Alleviate cash Shortages		Due to the Duplicity of Paper money		Less Annual Fees/Cost		<p>(Senthilkumar, 2016)</p>	<p>Frequency table, Mean, Median and Mode Analysis Chi-Square</p>
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<p>10. For what purpose do you use Plastic Money?</p> <p>11. Did you use Plastic Money before demonetization?</p> <p>12. From where do you get information about Plastic Money?</p> <p>13. Who influence your decision to adopt Plastic Money?</p> <p>14. Do you face any difficulty while using Plastic Money?</p>	<p>(Hugar, 2016)</p>	<p>Frequency table, Chi-Square</p>																
<p>15. Show your <b>LEVEL OF AGREEMENT</b> with the below-mentioned statements about the <b>PLASTIC MONEY</b>.</p> <p>1 Plastic money enables me to accomplish tasks more quickly.</p> <p>2 Plastic money increases my number of daily transactions.</p> <p>3 Using plastic money is safe and effective nowadays.</p> <p>4 Due to the Duplicity of Paper Currency, I am</p>	<p>(Pratim, 2017) (Statement 1-7)</p>	<p>Frequency table, Reliability test, Normality test, Kruskal Wallis test, Correlation &amp; Regression Test.</p>																

<p>shifting to plastic money.</p> <p>5 It is easy to handle transactions involving a large amount of money.</p> <p>6 The use of plastic money provides all information about my transactions.</p> <p>7 Plastic money will help solve the problem of corruption.</p> <p>8 Plastic money, such as credit cards, is easy to use.</p> <p>9 It is easy to interact with shopkeepers using plastic money.</p> <p>10 It is flexible to use plastic money.</p> <p>11 Learning to follow procedures for making transactions through plastic money is easy.</p> <p>12 Payments made through plastic money require minimum effort.</p> <p>13 Using a plastic money channel to operate my account would be wise.</p> <p>14 Plastic money helps me to complete all my financial transactions on time</p> <p>15 There is less risk of financial fraud using plastic money</p> <p>16 Demonetization has made the usage of plastic money compulsory</p> <p>17 I would like to increase the frequency of using plastic money in the future.</p> <p>18 My usage of plastic money is influenced by my primary reference group (family and friends).</p> <p>19 I desired to use plastic money to operate my bank accounts.</p> <p>20 Financial transactions through plastic money enhance my CIBIL (Credit Score) in the financial system.</p> <p>21 The use of plastic money allows me to make different payments and avail myself of a credit period.</p> <p>22 Using plastic money costs a lot as the number of</p>	<p>Statement 8 self-developed</p> <p>(Nidhi, 2021) (Statement 9-11)</p> <p>(Sreeja, 2018) (Statement 12-20)</p>	
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<p>transactions I will do with it is increased.</p> <p>23 Plastic money is more costly than cash because annual maintenance charges increase after GST.</p> <p>24 I have fears of financial loss due to the use of plastic money.</p> <p>25 plastic money has more interest and penalty costs for delayed payment.</p> <p>26 After demonetization, people used more plastic money, So I also started using it.</p> <p>27 People who are important to me think I should use plastic money.</p> <p>28 I 'am afraid that in the event of fraud, I will get the blame from society or my family.</p> <p>29 The use of plastic money becomes a symbol of high Socio-Economic status.</p> <p>30 I feel secure while using plastic money in online and offline transactions.</p> <p>31 The use of plastic money is more secure and safe than cash.</p> <p>32 Plastic money services keep customers' interests best in mind.</p> <p>33 It is safer to carry out transactions involving a large amount of money through plastic money mode.</p> <p>34 Government policy encourages me to use plastic money.</p> <p>35 Plastic money is encouraged by the government and RBI by introducing various policies and promotional incentives.</p> <p>36 The government policy proves more beneficial for those who use plastic money instead of cash.</p> <p>37 I appreciate the government and RBI's initiatives to ensure safety and security in all plastic money transactions.</p>	<p>(Prateek, 2014) (Statement 21-28 and 30-31)</p> <p>Statement 29 self-developed</p> <p>(SINGH, 2015) (Statement 32-37)</p>	
<p><b>16.</b> Show your <b>SATISFACTION LEVEL</b> on the following grounds after using Plastic Money.</p> <p>1 Safety and Security</p>	<p>(Kumar, 2018)</p>	<p>Frequency table, Reliability test, Normality test,</p>

<p>2 Rewards and Cashback</p> <p>3 Convenience (Anytime Anywhere)</p> <p>4 Customer Care Services by the bank</p> <p>5 Information a bank provides regarding hidden charges, late payment charges, terms and conditions, etc.</p> <p>6 Alleviate cash Shortages, the risk of carrying cash, and the Duplicity of Paper money</p> <p>7 Annual Fees/Cost</p> <p>8 Interest and Penalty cost for delayed payment</p>		<p>Kruskal Wallis test,</p> <p>Correlation &amp; Regression Test.</p>
<p><b>17. Show your LEVEL OF AGREEMENT with the below-mentioned statements about the PLASTIC MONEY.</b></p> <p>1 Overall, using plastic money is advantageous.</p> <p>2 Overall, it is easy for me to use plastic money.</p> <p>3 Overall, plastic money is the best option for my financial transactions.</p> <p>4 Overall, I am sure the magnitude of the usage of plastic money will increase shortly.</p> <p>5 Overall, I perceive that using plastic money is more costly than cash.</p> <p>6 Overall, it has a significant social impact and has affected various groups.</p> <p>7 Overall, I perceive that using plastic money is more secure nowadays.</p> <p>8 Overall, I believe that using plastic money is encouraged by the government and RBI's current policies.</p> <p>9 Overall, I am satisfied with the usage of plastic money.</p>	<p>(Mukaria, 2021) (Statement 1,3,5,7 and 9)</p> <p>(Pratim, 2017) (Statement 2,4,6 and 8)</p>	<p>Frequency table, Reliability test, Normality test, Kruskal Wallis test,</p> <p>Correlation &amp; Regression Test.</p>
<p><b>18. Would you like to give any suggestions about Plastic Money?</b></p>	<p>Developed by the Researcher.</p>	<p>Frequency table</p>
<p>Demographic Details</p>	<p>Developed by the Researcher.</p>	<p>Frequency table, Chi-Square</p>

**Table 3.4 Part B. Digital Wallet**

Questionnaire								Empirical Support (question number) with Source	Test Applied																																																																								
<p>1. Have you used a Digital Wallet (Virtual Wallet)?</p> <p>2. Which Digital Wallet do you use?</p> <p>3. Show your level of awareness about the functionality of Digital Wallets.</p> <p>4. Since how long have you been using Digital Wallet?</p> <p>5. On average, how many transactions do you do through Digital Wallet in a single day?</p>								<p>The researcher developed Q No 1 and 2. (Kumar, 2018) (Q No 3, and 5)</p> <p>(Rai, 2019) (Q No 4)</p>	<p>Frequency table Chi-Square</p>																																																																								
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<p><b>11. Do you face any difficulty while using Digital Wallet?</b></p>		Chi-Square
<p><b>12. Show your LEVEL OF AGREEMENT with the below-mentioned statements about DIGITAL WALLET.</b></p> <p>1 Digital Wallet enables me to accomplish tasks more quickly.</p> <p>2 Doing payments through Digital Wallets is convenient.</p> <p>3 Digital Wallet increases my number of daily transactions.</p> <p>4 Using a Digital Wallet is safe and effective nowadays.</p> <p>5 Due to the Duplicity of Paper Currency, I am shifting to Digital Wallet.</p> <p>6 It is easy to handle transactions involving a large amount of money.</p> <p>7 The use of Digital Wallet provides all information about my transactions.</p> <p>8 Digital Wallet will help solve the problem of corruption.</p> <p>9 Payments made through Digital Wallet require minimum effort.</p> <p>10 It is easy to do transactions at any shop through Digital Wallet.</p> <p>11 Using a Digital Wallet channel to operate my account would be wise.</p> <p>12 Digital Wallet helps me to complete all my financial transactions on time</p> <p>13 There is less risk of financial fraud using Digital Wallet</p> <p>14 Demonetization has made the usage of Digital Wallet compulsory</p> <p>15 I would like to increase the frequency of using Digital Wallet in the future.</p> <p>16 My usage of Digital Wallet is influenced by my primary reference group (family and friends).</p>	<p>(Pratim, 2017) (Statement 1-7)</p> <p>Statement 8 self-developed</p> <p>(Nidhi, 2021) (Statement 9-11)</p> <p>(Sreeja, 2018) (Statement 12-20)</p>	<p>Frequency table, Chi-Square</p>

<p>17 Discounts and cashback offers attract me to use it.</p> <p>18 The Quality of E-wallet service providers also affects the intention to use these services.</p> <p>19 Digital Wallet provide flexibility and mobility</p> <p>20 Digital Wallet helps me to complete all my financial transactions on time.</p> <p>21 I have fears of financial loss due to the use of Digital Wallet.</p> <p>22 Paying money through Digital Wallets is a trusted source of payment mechanism</p> <p>23 After demonetization, people used more Digital Wallet, so I also started using it.</p> <p>24 People who are important to me think that I should use Digital Wallet.</p> <p>25 I am afraid that in the event of fraud, I will be blamed by society or my family.</p> <p>26 Digital Wallets have become a symbol of high socio-economic status.</p> <p>27 I believe that using a Digital Wallet puts my privacy at risk</p> <p>28 There is significant risk in Internet shopping/social networks using mobile payments</p> <p>29 I think dealing with mobile payments is a risky choice.</p> <p>30 I feel secure while using Digital Wallet in online and offline transactions.</p> <p>31 Digital wallets are more secure and safe than cash.</p> <p>32 I believe Digital Wallet services best keep customers' interests in mind.</p> <p>33 It is safer to carry out transactions involving a large amount of money through Digital Wallet mode.</p> <p>34 Government policy encourages me to use a Digital Wallet.</p>	<p>(Prateek, 2014) (Statement 21-28 and 30-31)</p> <p>Statement 29 self-developed</p> <p>(SINGH, 2015) (Statement 32-33)</p>	
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<p>35 The government and RBI encourage digital wallets by introducing various policies and promotional incentives.</p> <p>36 The government policy proves more beneficial for those who use Digital wallets instead of cash.</p> <p>37 I appreciate the government and RBI's initiatives to ensure safety and security in all transactions conducted through Digital Wallet.</p>	<p>(Shaw, 2018) (Statement 34-37)</p>	
<p><b>13. Which Digital Wallet would you recommend for your friends and relatives, and Why?</b></p>	<p>The researcher developed it.</p>	<p>Frequency table,</p>
<p><b>14. Show your LEVEL OF SATISFACTION on the following grounds after using a Digital Wallet.</b></p> <p>1 Safety and Security</p> <p>2 Rewards and Cashback</p> <p>3 Convenience (Anytime Anywhere)</p> <p>4 Customer Care Services of digital wallet services provider</p> <p>5 Alleviate cash Shortages, the risk of carrying cash, and the Duplicity of Paper money</p> <p>6 Free Services</p>	<p>(PRASAD, 2021)</p>	<p>Frequency table, Reliability test, Normality test, Kruskal Wallis test, Correlation &amp; Regression Test.</p>
<p><b>15. Show your LEVEL OF AGREEMENT with the below-mentioned statements about DIGITAL WALLET.</b></p> <p>1 Overall, I perceive that using a Digital Wallet is advantageous.</p> <p>2 Overall, I perceive it is easy for me to use Digital Wallet.</p> <p>3 Overall, I think Digital Wallet is the best option for doing my financial transactions.</p> <p>4 Overall, I am sure the magnitude of the usage of Digital Wallet will increase shortly.</p> <p>5 Overall, I perceive that using a digital wallet is more costly than using cash.</p> <p>6 Overall, it has a significant social impact and has affected various groups.</p> <p>7 Overall, I perceive using a Digital Wallet is more secure nowadays.</p> <p>8 Overall, I believe that using a digital wallet is encouraged</p>	<p>(Kumar, 2018) (Statements 1 and 2)</p> <p>(Mukaria, 2021) (Statements 3,5,7 and 9)</p> <p>(Pratim, 2017) (Statement 4,6 and 8)</p>	<p>Frequency table, Reliability test, Normality test, Kruskal Wallis test, Correlation &amp; Regression Test.</p>

by the government and RBI's current policies. 9 Overall, I am satisfied with the usage of Digital Wallet.		
16. Would you please suggest some ways to make Digital Wallet better?	Developed by the Researcher.	Frequency table,
Demographic Details	Developed by the Researcher.	Frequency table, Chi-Square

**3.8.3 Explanation of scale used<sup>1</sup>**- These questions were formulated by consulting earlier research on digital wallets and plastic money. A five-point Likert scale, ranging from 1 (strongly disagree), 2 (disagree), 3 (neither agree nor disagree), 4 (agree) and 5 (strongly agree), was used for evaluating the responses.

**Origin of Scale:** The scale has been the subject of earlier research (Rook & Gardner, 1993; Rook & Hoch, 1985), but Rook and Fisher (1995) conducted the most thorough testing. Thirty-five items were created for that study after a review of the literature, and 281 undergraduate business students examined them. Purifying the initial test and study 1 sample produced a complete nine-item scale. Confirmation of the measure's concurrent and discriminating validity was discovered, which will be discussed in more detail below (Rook, 1997). Reliability: According to investigations 1 and 2, the scale possesses alphas of—88 and.82, respectively (Rook & Fisher, 1995).

### **3.9: Data Processing and Analysis:**

Data processing is organizing, transforming, extracting, and extracting data into the correct output form for future usage. Processing procedures must be extensively documented to guarantee the data's usefulness and consistency. Data will be subjected to procedures and techniques used on data to identify tendencies, characterize facts, create hypotheses, and test them. Data quality control, statistical data analysis, modelling, and outcome evaluation are all included in this. The organization of the data allows for simple analysis and interpretation.

During the survey, nominal and ordinal data were collected. When respondents are first-time users of technology, such as mobile wallets, implications can also be made from indirect or direct responses since these financial tools are utilized more frequently with family and

<sup>1</sup> <http://scaleresearch.siuc.edu./182v3.htm>

friends than strangers. As the study shows, using several approaches can provide us with an aspect of human character and user behaviour.

The correct classification is selected for each response, and after that, statistical techniques are used to examine the data. When appropriate, anomalies are eliminated to maintain uniformity. In other cases, the data are analyzed to compare the data summaries for mobile wallets and plastic money. The normalization process is carried out after considering that plastic money is considerably more developed regarding security precautions, usability, and other factors. Wallet technology is less than eight years old compared to the 60 years of plastic money. The data must be normalized to make accurate conclusions because more current market entries significantly impact the setup.

Users' perceptions of plastic money and mobile wallets and their adoption of them could be influenced by various circumstances and characteristics. The following significant influencing elements were correctly identified from the data, as well as their effects on the development and uptake of mobile wallets and plastic money.

1. Economical variables such as development and investing.
2. Technical aspects, such as characteristics, influence how these tools are used.
3. Age-related demographic characteristics and also how they impact card uptake and utilization.
4. Perception elements like convenience, safety, and usability
5. Education, knowledge, and awareness can influence such devices' use.

The collected data are prepared and tabulated before statistical analysis is done. The techniques listed below are used to make assumptions and conclusions.

1. Descriptive statistics
2. Cronbach alpha
3. Chi-Square Test
4. Normality Test
5. Kruskal Wallis Test
6. Correlation
7. Regression

**1 Descriptive statistics:** A sample of descriptive statistics describes or sums up a data set's properties, such as a variable's mean, standard deviation, or frequency, which are d. Inferentialtics. We can help us better grasp the sample's constituent parts by using the aggregate collected data, which is identical across wallets and plastic money; data is

being used to uncover the finer details of the information provided. To do this, studying the distinctions between the variables is critical.

This study employs descriptive statistics to identify disparities in the purchasing patterns of digital wallet users and those who use plastic money. Finding underlying patterns that are generally concealed from an objective viewpoint is helpful. Such an illustration emphasizes making one purchase with plastic money, which provides reliable statistical results and a pleasant aspect.

**2 Cronbach alpha:** Cronbach's alpha is most commonly used to quantify internal consistency (reliability). It is usually used to determine whether a scale of several Likert items in a questionnaire or survey is dependable.

**3 Chi-Square Test:** This test aims to determine whether the observed and expected frequencies differ significantly. This method determines the data set's chance of being true under the null hypothesis. This study uses the chi-square test to determine how demographic characteristics affect the use of plastic money and digital wallets. These demographic variables include gender, age, city, education, profession, monthly family income, and marital status.

**4 Normality Test:** Determining the statistical techniques that will be used to get the result is crucial based on the primary information gathered. The statistics techniques depend on data, which must be examined using the Normality Test to determine whether the data is parametric or non-parametric.

A normality test is carried out using SPSS. Parametric tests should be used if the collected data are standard, while non-parametric methods should be used if the data are not typical. Data from a sample with a normal distribution are referred to as standard data. A distribution of frequencies curve with a bell shape represents a normal distribution. This suggests that the data is centred around the mean, indicating that the mean response provided by respondents is generally consistent. If the data are not standard, non-parametric methods should be used. The data, in this case, does not follow normal distribution. This suggests that the information gathered from the primary research's responses fluctuates and is not centred on the average response. As a result, the data's curve is not similar to a bell shape.

**5 Kruskal Wallis Test:** Perform this test to determine if samples are within the same distribution. It compares two or more independent samples with the same or different sample sizes. It is only applied to non-parametric data when the one-way ANNOVA's assumptions are not fulfilled.

This study uses the Kruskal Wallis test to see whether user opinions about plastic money and virtual wallet attitude, perceived security, Behavioral intention, government policies, social impact, cost, perceived ease of use, perceived usefulness, and satisfaction after use differ among users who are grouped according to age, gender, city, education, profession, monthly family income, and marital status.

**6 Pearson Correlation:** The correlation statistical technique is used to determine the relationship between two different variables. Pearson Correlation helps to determine how a particular factor depends on another. It is the most widely used method for calculating a linear correlation. The correlation coefficient, which ranges from -1 to 1, indicates the degree and direction of the relationship between two variables. A direction shift from one variable is reflected in another one. If the correlation coefficient is closer to one, the variables are considered highly correlated; when closer to zero, the variables are considered highly not correlated.

The correlation coefficient technique has been applied in this study to determine the link between different elements using the technology acceptance model. It has been used to determine how one variable affects another, ultimately resulting in the user's approval of the new technology. The correlation coefficient technique measures the relationship between perceived ease of use, perceived usefulness, attitude, behavioral intention, Social impact, cost, government policies, perceived security and satisfaction after using plastic money and virtual wallets. This article examines the most recent emerging technologies in the financial and money domains, which are all examined here.

**7 Regression:** Regression analysis was performed to examine the relationships between one or more independent variables and a dependent variable. It could be utilized to simulate the future relationship between variables and evaluate how strongly they are related. In this study, a multiple regression analysis was used to test the influence of certain variables such as Perceived Usefulness, Perceived Ease of Use, Attitude, Cost, Behavioral Intention, Social Impact, Perceived Security, Government Policies, and Satisfaction after using plastic money and virtual wallets.

### 3.10 Limitations of the study:

- (1) The study is limited to selected cities of Gujarat
- (2) The sample size used for the study is small. Hence, the results cannot be taken as universal
- (3) Consumer perceptions change from time to time with technological advancement.
- (4) Most respondents will not answer the open-ended questions, such as suggestions and opinions.

### 3.11 Conclusion:

This chapter addressed the methods to gather data to achieve the study's objectives. It explains how the questionnaire is divided into variables according to the predetermined objectives. It also demonstrates the rationale behind creating the questionnaire, which includes questions about Plastic Money and Digital Wallets. The statistical techniques used to test the hypothesis and reach a conclusion are thoroughly covered in this chapter.

## References

### Bibliography

- Hugar, B. S. (2016). *A Study on Usage Pattern of Credit Card Holders in Hyderabad Karnataka Region*. Hyderabad: Department of MBA, Gulbarga University.
- Kumar, P. (2018). *An Analysis of Growth Pattern Of Cashless Transaction System An Evidence From Lucknow City*. Lucknow: Faculty of Uttaranchal Institute of Management, Uttaranchal University.
- Mukaria, B. (2021). *Users Perception Towards Mobile Wallets A Study of Selected Government and Private Wallets*. Department of Business Administration, Lingayas University.
- Nidhi, S. (2021). *Study of consumer intention to adopt mobile wallets*. School of Management Studies, Guru Gobind Singh Indraprastha University.
- PRASAD, R. (2021). *A Study On Consumers Satisfaction And Attitude Towards Online Shopping In Chennai City*. Madras: Department of Commerce, University of Madras.
- Prateek. (2014). *ATTITUDINAL MODEL FOR TECHNOLOGY ACCEPTANCE: A CASE OF SELF-SERVICE TECHNOLOGIES IN BANKS*. Jammu: The Business School, University of Jammu.
- Pratim, K. S. (2017). *Usage of Plastic Money and Virtual Wallet as Payments in and around Bengaluru City*. Jharkhand: Faculty of Management Studies, ICFAI University, Jharkhand.
- Rai, S. J. (2019). *A study of demonetization on social and economic factors with reference ssi*. Faculty of Commerce & Management, Shri Jagdishprasad Jhabarmal Tibarewala University.

- Senthilkumar. (2016). *A study on custom customers' perceptions of debit card usage and private sector banks in the dharmapDharmapuri district*. Dharmapuritment of Commerce, Periyar University.
- Shaw, B. (2018). *Moderating Effects of Situational Variable and Smartphone Addiction on the Factors Influencing Consumer's Intention to Continued Use of Mobile Payment Services in India*. Faculty of Management, ICFAI Foundation for Higher Education.
- SINGH, S. (2015). *IMPACT OF CONSUMER ADOPTION TRUST AND SECURITY CHALLENGES ON MOBILE BANKING AN INDIAN STUDY*. Department of Textile Science and Apparel Design, SNTD Women University.
- Sreeja, N. (2018). *A study on preference and usage of plastic money among cardholders in Kanyakumari district*. Department of Management Studies, Manonmaniam Sundaranar University.