CHAPTER- FOUR

DATA ANALYSIS & INTERPRETATIONS OF THE RESEARCH STUDY

DETAILED CONTENT AT A GLANCE

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EXECUTIVE SUMMARY OF CHAPTER NUMBER FOUR:

The chapter number four entitled as "Data Analysis and Interpretations of the Research Study" provides results of the research study based on analysis and interpretation of the analysed primary data that were collected using a structured non-disguised questionnaire from amongst the selected social network users from the selected four selected cities of the Gujarat State. The important areas that were considered by the research scholar keeping in mind the research problem and objectives of the research study which were operationalised through drafting of questions through which data and information were sought from the selected m-shoppers in the State of Gujarat. Awareness towards m-shopping applications, and use of smartphone, frequency , place of access , duration of accessing m-shopping applications, expectations & experience of smartphone attribute and smartphone shopping applications and the m-shopping intention leading to continuous use of m-shopping as well as recommending others too for m-shopping coupled with preparation of demographic profiles of the respondents based on selected background variables viz., Age, Educational Qualifications, Marital Status, and Income etc. has been provided in it. The researcher has also shared details about the perceived usefulness, perceived ease of use, trust and price sensitivity and the overall satisfaction from smartphone attribute and smartphone shopping applications. The researcher has made use of various mathematical and statistical tools viz., percentages, averages and frequency distribution supported with the graphical presentation of factual data and information gathered in this research study. The researcher had analysed primary data with by making use of statistical software SPSS-21 version.

CHAPTER- FOUR

DATA ANALYSIS & INTERPRETATIONS OF THE RESEARCH STUDY

4.0: INTRODUCTION:

The researcher had collected the information from various m(mobile)-shoppers, who had used smartphone for buying or shopping of products and or availing of services from four major cities of Gujarat. The data was organized and categorized, converted into readable format, analysed, interpreted and reported the results by using SPSS 15.0 for windows. The data had been presented in graphical and tabular format. This chapter represents the data analysis and interpretations of the research study.

4.1: PROFILE OF SELECTED SMARTPHONE USERS:

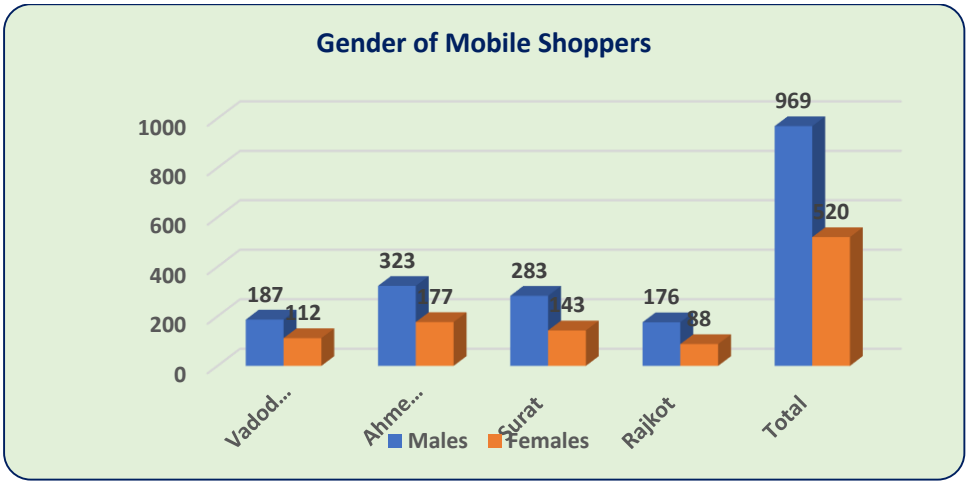
The researcher had attempted to collect the primary data from the smartphone users, who had made any transactions of m-shopping, using mobile applications downloaded in smartphones considering their opinion towards usefulness, ease of use, price & trust as well as selected demographic variables viz., Gender, Age Group, Marital Status, Education and Types of Family. The researcher had undertaken the surveys in the four selected cities viz., Baroda, Ahmedabad, Surat and Rajkot in the State of Gujarat.

The profile of the selected smartphone users who had engaged in electronic transactions using mobile applications using smart phone has been presented in table number 4.1.

Table Number: 4.1: Profile of the Selected M-Shoppers

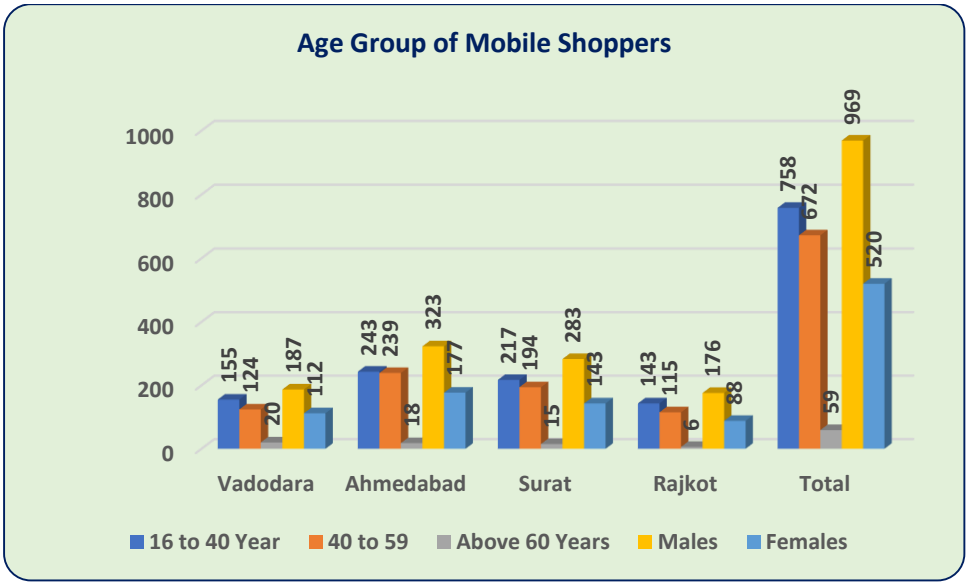
Selected Background Variables of Selected M-Shoppers		Vadodara	Ahmedabad	Surat	Rajkot	Gujarat State
		(Number and Percentages of Selected M-Shoppers)				
Gender	Males	187(62.5)	323 (64.6)	283(66.4)	176(66.7)	969(65.1)
	Females	112(37.5)	177 (35.4)	143 33.6)	88(33.3)	520(34.9)
Age Groups	16 to 40 Yrs	155(51.8)	243 (48.6)	217 50.9)	143 54.2)	758(50.9)
	40 to 59Yrs	124(41.5)	239 (47.8)	194 45.5)	115 43.6)	672(45.1)
	Above 60Yrs	20(06.7)	18(03.6)	15 (03.5)	06(02.3)	59(04.0)
Marital Status	Unmarried	140(46.8)	238 (47.6)	208 48.8)	151(57.2)	737(49.5)
	Married	159(53.2)	262 (52.4)	218(51.2)	113(42.8)	752(50.5)
Annual Income	Less than L	32(11)	52(10.5)	37(8.7)	43(16.3)	111(7.5)
	4 to 8 L	80(27.4)	110(22)	83(19.7)	71(27)	343(23.2)
	8 to 12 L	131(45.2)	219(43.8)	159(37.6)	107(40.7)	553(37.4)
	More than12	47(16.4)	119(23.7)	144(34)	16(16)	473(32)
Educational Qualification	Undergraduate	35(12)	45(9)	34(8)	32(12.1)	105(7.1)
	Graduate	68(23.4)	190(38)	118(27.8)	74(28)	358(24.2)
	PG	123(42.4)	180(36)	189(44.6)	94(35.4)	769(52)
	Professional	64(22)	85(17)	82(19.3)	64(24.5)	248(16.8)
Types of Family	Joint	159(53.2)	250(50.0)	208(48.8)	130(49.2)	747(50.2)
	Nuclear	140(46.8)	250(50.0)	218(51.2)	134(50.8)	742(49.8)
Total		**290**	**500**	**423**	**264**	**1480**

Graph Number: 4.1: Profile of the Selected M-Shoppers:
(City-wise Gender of the Selected M-Shoppers)



The graph number 4.1 provides city-wise information about the 'Gender' of the selected M-Shoppers. It was found that, Rajkot city top the list of M-Shoppers with 66.7 per cent male M-Shoppers and 33.3 per cent female M-Shoppers followed by 66.4 per cent males and 33.6 per cent female M-Shoppers in the Surat city. The Ahmedabad city consisted of 64.6 per cent male M-Shoppers and 35.4 per cent female M-Shoppers whereas these figures for the Vadodara city were 62 .5 per cent male and 37.5 per cent female M-Shoppers respectively. Overall, out of total 1489 Mobile Commerce users in selected cities of Vadodara, Ahmedabad, Surat and Rajkot 65.1 per cent were the males and 34.9 female M-Shoppers in the State of Gujarat.

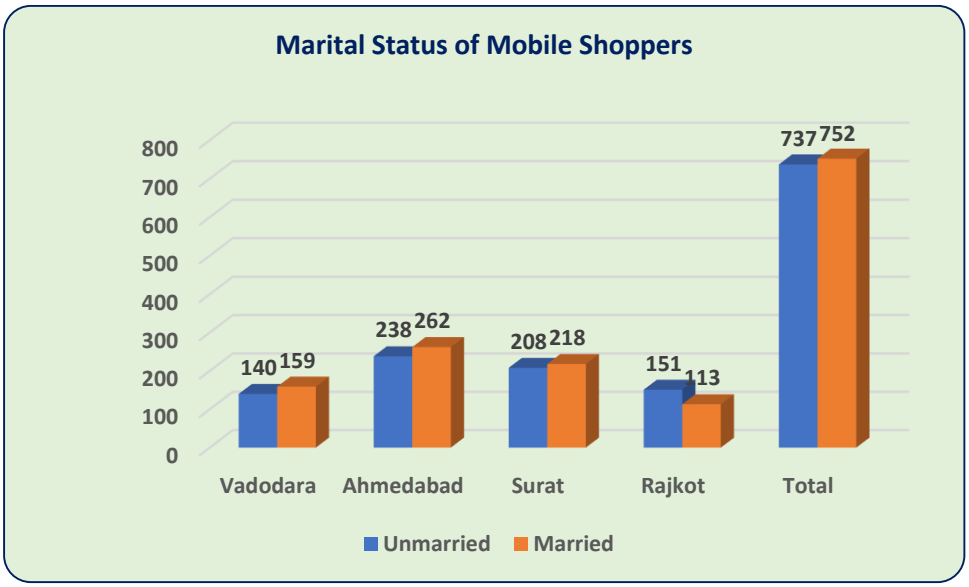
Graph Number: 4.2: Profile of the Selected M-Shoppers
(City-wise Age Group of the Selected M-Shoppers)



The above graph number 4.2 shows data and information about the age group of M-Shoppers. It revealed that 54.2 per cent of the M-Shoppers were belonging to the age group of 16 to 40 years in the Rajkot city followed by 51.8 per cent in Vadodara; 50.9 per cent in Surat; and 48.6 per cent in Ahmedabad cities respectively. In case of the age group of 40 to 59 years, 47.8 per cent M-Shoppers were found from the Ahmedabad city followed with 45.5 per cent of Surat city; 43.6 per cent of Rajkot city and 41.5 per cent were from the Vadodara city respectively. Considering the age group above 60 years, 6.7 per cent were M-Shoppers were belonging to Vadodara city followed with 3.6 per cent of the Ahmedabad city; 3.5 per cent of the Surat city and 2.3 per cent M-Shoppers were found from the Rajkot city respectively.

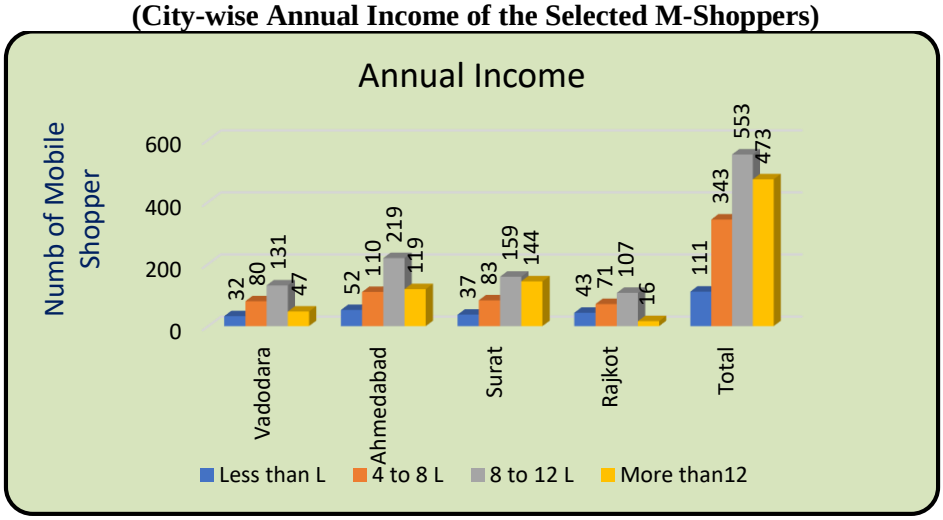
Overall, out of 1489 M-Shoppers, 50.9 per cent were found as belonging to the age group of 16 to 40 years followed by 45.1 per cent of the age group of 40 to 59 years whereas 4.0 per cent M-Shoppers were found as belonging to the age group above 60 years in selected cities of Vadodara, Ahmedabad, Surat and Rajkot respectively.

Graph Number: 4.3: Profile of the Selected M-Shoppers:
(City-wise Marital Status of the Selected M-Shoppers)



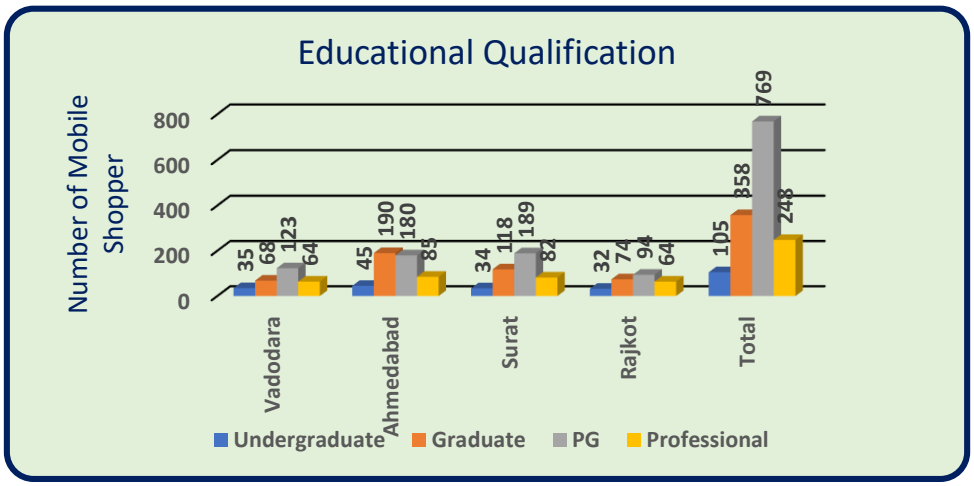
The above graph number 4.3 showcases the marital status of the M-Shoppers in which 53.2 per cent, 52.4 per cent, 51.2 per cent, and 42.8 per cent M-Shoppers were married, belonging to the Vadodara, Ahmedabad, Surat and Rajkot city respectively. Overall, 49.5 per cent of smartphone users were found as unmarried and 50.5 per cent as married from amongst the total 1489 M-Shoppers from the selected four cities of the Gujarat State.

Graph Number: 4.4: Profile of the Selected M-Shoppers
(City-wise Annual Income of the Selected M-Shoppers)



The graph number 4.4 above shows the annual income of the mobile shoppers. Majority (37.4 per cent) of the mobile shoppers belonged to the income group of Rs. 8 Lakh to 12 Lakh p.a. It shows that they have option of choosing price range of Smartphones considering their income. Very few belonged to the income group of above Rs. 12 lakhs and they have very broad option when it comes to the selection of Smartphones. Since mobile shopping provides enormous benefits, irrespective of income, mobile shoppers tend to use mobile shopping applications for various products right from booking movie tickets to buying costly gadgets.

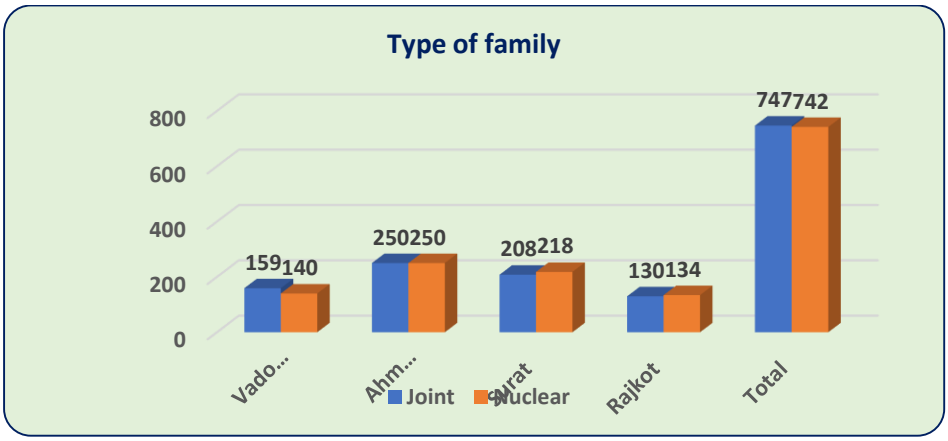
Graph Number: 4.5: Profile of the Selected M-Shoppers
(City-wise Educational Qualification of the Selected M-Shoppers)



The above graph number 4.5 represents the educational qualification of the selected mobile shoppers. Most mobile shoppers were educated and have exposure to do mobile shopping. 52 per cent of the mobile shoppers had the background of post-graduation and have hands on experience in carrying out mobile transactions. Since mobile shopping is having ubiquitous nature, it has huge potential to influence the people.

Mobile shoppers with good educational background can browse the products that they are looking for and compare them before making any buying decision. Since marketers are aiming to attract the customers in the vernacular language itself, it will open up wide range of product and service selection to the mobile shoppers. Ahmedabad shared good proportion of graduate (38 per cent) and post graduate (36 per cent) respectively.

Graph Number: 4.6: Profile of the Selected M-Shoppers
(City-wise Type of Family of the Selected M-Shoppers)



The above graph number 4.4 exhibits the types of family of the M-Shoppers that is nuclear or joint family. All across the selected cities of Ahmedabad, Vadodara, Surat and Rajkot similar trend was found with the count of joint and nuclear families. Overall, 50.2 per cent (747 M-Shoppers) M-Shoppers were found as living in joint families. 49.8 per cent (742 M-Shoppers) of them belonged to nuclear families. Almost in all the selected cities there was only a minor difference with the count of joint and nuclear families. 53.2 per cent, 50.0 per cent, 48.8 per cent, and 49.2 per cent M-Shoppers were found as belonging to joint families in the Vadodara, Ahmedabad, Surat and Rajkot cities respectively. On the other hand, 46.8 per cent, 50.0 per cent, 51.2 per cent, and 50.8 per cent M-Shoppers were found as living in nuclear families in the Vadodara, Ahmedabad, Surat and Rajkot cities respectively. The overall results of data analysis of demographic variables revealed that in case of 'Gender' on an average more than 62 percent of male and 38 percent female M-Shoppers were found involved in m-Commerce activities in the State of Gujarat.

In case of 'Age Groups', 50 per cent of them were from the age group of 16 to 40 whereas 45 per cent of the M-Shoppers were found in the age group of 40 to 59 years, and 5 per cent of M-Shoppers were belonging to the age group of above 60 years. There was not significant difference in the category of "Marital Status', and 'Type of the Family' because each married-unmarried and Joint -Nuclear categories were nearly, 50 percent of the M-Shoppers.

4.2.: BRAND IN-USE & BRAND USED OF SMARTPHONES:

As smartphone manufacturers release or upgrade smartphones at a faster pace, M-Shoppers also tend to update the phones as per the new technology or functions incorporated in the smartphones. M-Shoppers were asked to write down the names of the smartphone that they had used in past and currently using now. Majority of M-Shoppers had switched to another brand when they wanted to upgrade.

Table Number: 4.2: Selected M-Shoppers' Responses on Brand In-Use& Brand Used of Smartphones

Smartphones	Brands	Vadodara	Ahmedabad	Surat	Rajkot	Gujarat State
	(Number and Percentages of Selected M-Shoppers)					
Samsung	Using	46 (15.4)	67 (13.4)	55 (12.9)	28 (10.6)	196 (13.2)
	Used	35 (11.7)	76 (15.2)	60 (14.1)	45 (17.0)	216 (14.5)
Micromax	Using	9 (03.0)	39 (07.8)	31 (07.3)	16 (06.1)	95 (06.4)
	Used	36 (12.0)	58 (11.6)	44 (10.3)	29 (11.0)	167 (11.2)
Oppo	Using	29 (09.7)	51 (10.2)	43 (10.1)	29 (11.0)	152 (10.2)
	Used	35 (11.7)	36 (07.2)	30 (07.0)	22 (08.3)	123 (08.3)
Xiaomi	Using	51 (17.1)	72 (14,4)	63 (14.8)	40 (15.2)	226 (15.2)
	Used	29(09.7)	46 (09.2)	41 (09.6)	23 (08.7)	139 (09.3)
Lenovo	Using	37 (12.4)	26 (05.2)	29 (06.8)	22 (08.3)	114 (07.7)
	Used	16 (05.4)	37 (07.4)	32 (07.5)	20 (07.6)	105 (07.1)
Gionee	Using	24 (08.00)	41 (08.2)	43 (10.1)	21 (08.0)	129 (08.7)
	Used	25 (08.4)	35 (07.0)	36 (08.5)	22 (08.3)	118 (07.9)
Vivo	Using	16 (05.4)	74 (14.8)	46 (10.8)	28 (10.6)	164 (11.0)
	Used	11 (03.7)	30 (06.0)	28 (06.6)	21 (08.0)	90 (06.0)
Apple	Using	14 (04.7)	14 (02.8)	10 (02.3)	9 (03.4)	47 (03.2)
	Used	7 (02.3)	6 (01.2)	5 (01.2)	3 (01.1)	21 (01.4)
One Plus	Using	19 (06.4)	35 (07.0)	30 (07.0)	19 (07.2)	103 (06.9)
	Used	16 (05.4)	30 (06.0)	27 (06.3)	11 (04.2)	84 (05.6)
Honor	Using	4 (01.3)	5 (01.0)	5 (01.2)	4 (01.5)	18 (01.2)
	Used	5 (01.7)	14 (02.8)	12 (02.8)	6 (02.3)	37 (02.5)
Coolpad	Using	9 (03.0)	19 (03.8)	18 (04.2)	14 (05.3)	60 (04.0)
	Used	13 (04.3)	13 (02.6)	11 (02.6)	6 (02.3)	43 (02.9)
Azus	Using	15 (05.0)	18 (03.6)	16 (03.8)	11 (04.2)	60 (04.0)
	Used	17 (05.7)	14 (02.8)	12 (02.8)	7 (02.7)	50 (03.4)
Sony	Using	8 (02.7)	8 (01.6)	6 (01.4)	5 (01.9)	27 (01.8)
	Used	8 (02.7)	8 (01.6)	6 (01.4)	1 (00.4)	23 (01.5)
Motorolo	Using	8 (02,7)	14 (02.8)	15 (03.5)	6 (02.3)	43 (02.9)
	Used	15 (05.0)	51 (10.2)	33 (07.7)	18 (06.8)	117 (07.9)
Nokia	Using	5 (01.7)	7 (01.4)	7 (01.6)	4 (01.4)	23 (01.5)
	Used	25 (08.4)	36 (07.2)	40 (09.4)	23 (08.7)	124 (08.3)
Others	Using	5 (01.7)	10 (02.0)	9 (02.1)	8 (03.0)	32 (02.1)
	Used	6 (02.0)	10 (02.0)	9 (02.1)	7 (02.7)	32 (02.1)
Total	Using	299 (100)	500 (100)	426(100)	264(100)	1489 (100)
	Used	299 (100)	500 (100)	426(100)	264(100)	1489 (100)

It was due to the influence of the acquaintances and the review about the new launches in the magazines or on any websites. M-Shoppers had a choice of a wide variety of phones when it had come as a choice.

This part of the chapter has analysed the various customer-preferred brands. The researcher had analysed the data and results of Smartphone used and in use by the M-Shoppers as shown in the table number 4.2. M-Shoppers were using variety of brands as per their preferences, requirements and budget. Overall, there was a decline in the use of Nokia, Micromax, and Motorola among the top brands. Whereas, Xiaomi, Oppo and Vivo had received surge in its sales. Samsung had faced heavy competition with its new rivals in the segments of mid-range smartphones.

Out of 1489 M-Shoppers, 226 (15.2 Per cent) of them were using Xiaomi. It was an increase from the previous used per cent of 139 (9.3 Per cent) M-Shoppers. Xiaomi had seen continuous improvement along all the major cities, but less than 10 percent M-Shoppers were using Xiaomi in every selected city. Samsung had seen a slight drop in number of usages in all of the selected cities except Vadodara, where 3.7 per cent increase in Samsung was found. Micromax had reported considerable decline in the use of smartphone~~,~~ while Oppo smartphone had shown a rise in use among the smartphone users.

Small number of M-Shoppers were using Apple, but it had reported an improvement in use. Vivo smartphone also exhibited increase among the smartphone users from 6 per cent to 14.8 per cent in Ahmedabad. It was found that Nokia smartphones had reported an overall decline in the use from 8.3 per cent to 1.5 per cent. There was a sharp decline in all of the selected cities. The smartphone manufacturers with innovative technologies and swift to adopt the new ideas had led the growth in sales. Xiaomi had improved its sales by implementing new strategies.

It had focused on mid-range smartphones that were affordable by the majority of the M-Shoppers in India. Xiaomi had invested in improving the quality specifications of smartphones such as processor, camera quality, and display. It had spent enormous time in the R&D department. The notable strategies of Xiaomi include Made in India tagline, digital advertisement, high-quality accessories, and low margin.

Nokia lost its market share by not meeting the expectations of the M-Shoppers. It was unable to withstand its competition. The quality of high-end models in the Nokia smartphones failed to satisfy the needs of the M-Shoppers. The primary reason for Nokia to lose its business was lack of vision and focus on Software.

Micromax saw a dip in the sale because it could not meet up the technical revolution of migration from 3G to 4G. Micromax was not rapid enough to pick up the smartphones with 4G capabilities and lost its sales to Chinese manufacturers. Microsoft lacked the future vision and was not prepared for the technical advancements.

Overall use of Samsung Smartphone reported decline because of other upcoming android brands in affordable range, while use of Apple phones too had reported an increase, though its market share was found very less in comparison of other android phones.

4.3: M-SHOPPERS' RESPONSES ON AMOUNT SPENT ON THE SMARTPHONES:

Pricing of a smartphone is critical for the manufacturers to win over the competitors. India had a big pool in the middle-income group, therefore, most of the smartphone manufacturers were focusing on mid-range smartphones. The M-Shoppers were asked to mark the amount they spent on smartphones with some ranges. It has revealed the preference of the M-Shoppers and their affordability when it came to the smartphone purchase. The table and graph below would help to understand the analysis of the amount spent on smartphones. The researcher had analysed the data on amount spent on the smartphones by the M-Shoppers, which is shown below in Table Number 4.3

Table Number: 4.3: Selected M-Shoppers' City-wise Responses on Amount Spent on Smartphones

Amount Spent on Mobile (In Rupees)	Vadodara	Ahmedabad	Surat	Rajkot	Gujarat State
	(Number and Percentages of Selected M-Shoppers)				
4000-8000	48 (16.1)	112 (22.4)	92 (21.6)	70 (26.5)	322 (21.6)
8000-12000	87 (29.1)	178 (35.6)	113 (26.5)	85 (32.2)	463 (31.1)
12000-15000	101 (33.8)	125 (25.0)	153 (35.9)	74 (28.0)	453 (30.4)
15000-30000	58 (19.4)	67 (13.4)	55 (12.9)	27 (10.2)	207 (13.9)
30000 and above	5 (01.7)	18 (03.6)	13 (03.1)	8 (03.0)	44 (03.0)
Total	299 (100)	500 (100)	426 (100)	264 (100)	1489 (100)

Graph Number: 4.7: Selected M-Shoppers' City-wise Responses on Amount Spent on Smartphones (In Rupees)

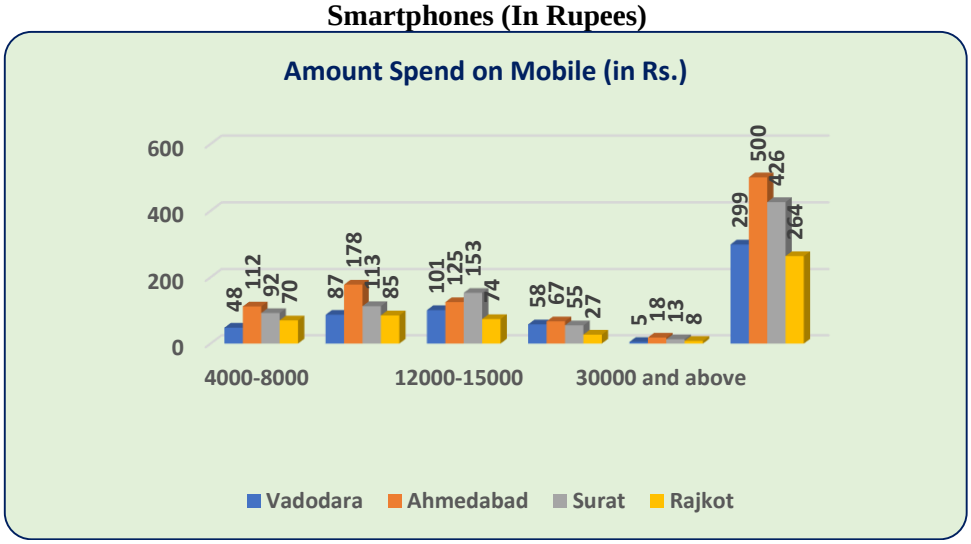


Table number: 4.3 and Graph no. 4.5 show the data analysis concerning the amount spent on smartphones in selected cities of the state of Gujarat.

Majority (61.5 per cent) of the M-Shoppers across the four selected cities spent money on the smartphones with the segment of the price range of Rs.8000/- to Rs.15000/-. Most of the M-Shoppers preferred the mid-segment of smartphones considering the value for money. Top selling brands of Xiaomi, Vivo and Samsung focused on the mid-price range smartphones of the middle-class population of India. M-Shoppers preferred to buy the smartphones with innovative technologies that supports 4G connectivity, gaming functionalities and good battery back-up.

The M-Shoppers, who preferred smartphone of Rs. 30000/- & above were very less in number. The higher-end smartphone users consider the features of good camera features, top-notch processor, display type, fast charging, premium build quality, and good battery life. Similar trend had been identified across all the four major selected cities in Gujarat viz., Ahmedabad, Vadodara, Surat and Rajkot.

A similar trend was found across all four major selected cities i.e. mid-range smartphones were widely used with the price range of Rs. 8000/- to Rs.15000/-. The major M-Shoppers preferred the smartphones that were good for the day-to-day use, good built quality, sustaining heavy usage, handy while travelling and easy to handle. Few M-Shoppers were not willing to invest much on the smartphones considering the updated versions were getting released in shorter intervals and drop in the smartphone prices as they days go by.

Implications: There was always a trend in price drop when the higher version was released within the same segment. M-Shoppers were willing to exchange their smartphones for the higher upgraded version. The reasons for having minimal contribution for costly smartphones were the most of the M-Shoppers were able to get all desired facilities in the smartphones that were available in the mid-range market itself. Compared to the cutting-edge technology available in the high-end smartphones, there were no appealing or enticing features that worth the high price. Few M-Shoppers instead of investing in a single costly phone for a longer period of time, they used to change the smartphones which were affordable with exciting additional features, which implies that marketer should built maximum features in mid-range smartphones.

4.4: M-SHOPPERS' FREQUENCY OF M- SHOPPING USING SMARTPHONES:

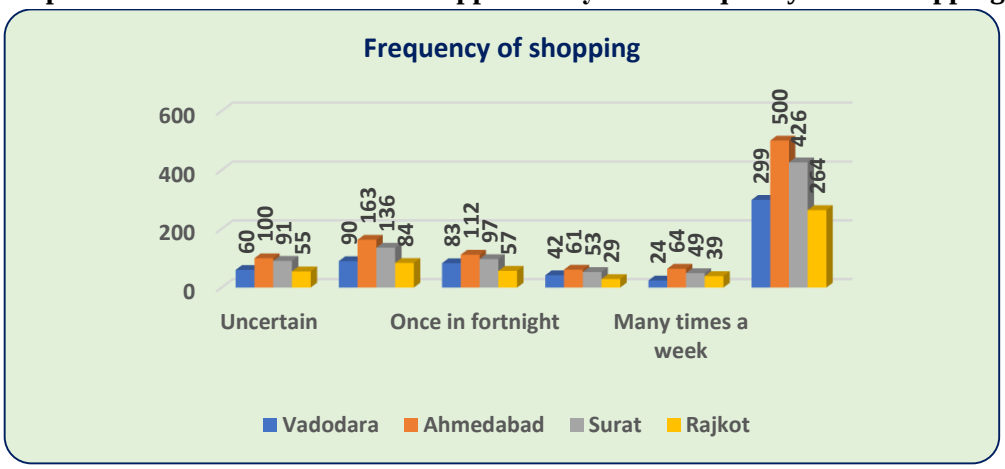
Smartphone users were engaged in mobile shopping activities according to their convenience and the need at the moment.

Mobile shopping was an ongoing activity based on their experience and feedback from other shoppers. This research study had analysed the frequency of shopping among the M-Shoppers in the table number 4.14.

Table Number: 4.4: Selected M-Shoppers' City-wise Frequency of M- Shopping

Frequency of M-Shopping	Vadodara	Ahmedabad	Surat	Rajkot	Gujarat State
	(Number and Percentages of Selected M-Shoppers)				
Uncertain	60(20.1)	100 (20.0)	91(21.4)	55 (20.8)	306 (20.6)
Once in a Month	90 (30.1)	163 (32.6)	136 (31.9)	84 (31.8)	473 (31.8)
Once in fortnight	83 (27.8)	112 (22.4)	97 (22.8)	57 (21.6)	349 (23.4)
Once a week	42 (14.0)	61 (12.2)	53 (12.4)	29 (11.0)	185 (12.4)
Many times, a week	24 (8.0)	64 (12.8)	49 (11.5)	39 (14.8)	176 (11.8)
Total	299 (100)	500 (100)	426 (100)	264 (100)	1489 (100)

Graph Number: 4.8: Selected M-Shoppers' City-wise Frequency of M- Shopping



The table number 4.4 and graph number 4.6 depict the data analysis on the frequency of m-shopping across the cities of Vadodara, Ahmedabad, Surat and Rajkot and offered following results:

Amongst 1489 less than half of the smartphone users were shopping using their smartphone once in a month across all the selected cities of Vadodara, Ahmedabad, Surat and Rajkot. The frequency of many times in a week shared the lowest portion of 11.8 Per cent in all the selected four cities. 20.6 per cent smartphone users were uncertain about their shopping frequency. Among 1489 selected smartphone users, 23.4 per cent users were found shopping once in fortnight and 12.4 per cent M-Shoppers were found doing m-shopping once in a week. M-Shoppers did online shopping or any cash transactions mostly once in a month. They involved in various shopping or service activities in the mobile application.

The activities that drive them to do online shopping activities were booking tickets for the movie show, paying the telephone bills, recharging the prepaid connections of the mobile subscriptions, booking travel tickets, and paying the bills in the local grocery store using Paytm applications.

The M-Shoppers, who had the habit of doing shopping on mobile applications fortnightly (23.4 per cent), did the shopping on the ornamental accessories, clothing, or any household items.

They did intense analysis before selecting a product by going through various shopping applications, comparing different products within the same category, and looking for alternative products within the same specifications.

The M-Shoppers that conducted shopping on mobile applications once in a week or many times a week, mostly used it to redeem the coupons or the points that earned in the mobile wallets. They gained the earned points or accumulate the points by doing frequent shopping as a perk.

Implications: There were two categories where online shopping was more in comparison of other categories and those are m-shopping once in fortnight and once in a month. This implies that normally, m-shoppers are not addicted to shopping they are doing it as & when required and to retain the M-Shoppers and make them to do the frequent shopping, most mobile shopping applications provided points based on the money that they spent, they gifted the frequent shoppers with discounts coupons.

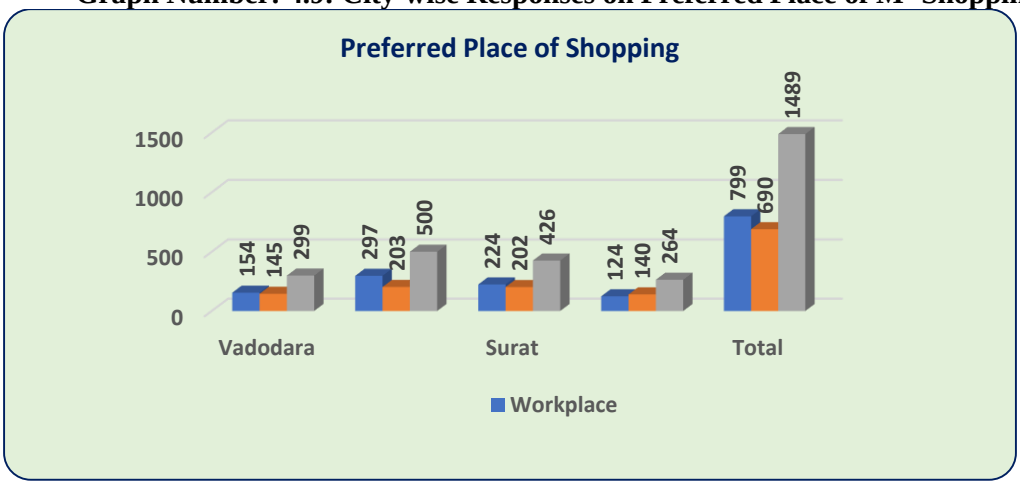
4.5: M-SHOPPERS' PREFERRED PLACE OF M-SHOPPING:

Even though smartphone provided the option of anytime shopping, M-Shoppers had preferred a place for convenient shopping. This study helped to understand the most preferred place of shopping of the M-Shoppers, whether it was home or the workplace. For the students, the educational institutions where they were studying considered to be the workplace for convenient of the research study. Each place had its' own advantages and disadvantages. The place where the M-Shoppers shopped had a different set of influencers in the product and mobile shopping applications selection. The table and graphs below would help to understand the preferences of the places of the M-Shoppers for the better mobile shopping experience.

Table Number: 4.5: City-wise Responses on Preferred Place of M- Shopping

Preferred Place of Shopping	Vadodara	Ahmedabad	Surat	Rajkot	Gujarat State
	(Number and Percentages of Selected M-Shoppers)				
Workplace	154 (51.5)	297 (59.4)	224 (52.6)	124 (47.0)	799 (53.7)
Home	145 (48.5)	203 (40.6)	202 (47.4)	140 (53.0)	690 (46.3)
Total	299 (100)	500 (100)	426 (100)	264 (100)	1489 (100)

Graph Number: 4.9: City-wise Responses on Preferred Place of M- Shopping



The table number 4.5 and graph number 4.7 depict the data analysis relating the place from where the M-Shoppers did the mobile shopping using the smartphone provided the following details:

The data had revealed that almost similar trend was found across Vadodara, Ahmedabad, and Surat. In these cities' majority of M-Shoppers stated that the workplace was their preferred place of shopping, unlike the M-Shoppers in Rajkot who said that home was the preferred place of shopping. The cities of Vadodara, Ahmedabad, and Surat M-Shoppers were of students and business people. Therefore, they had more exposure to shop while they work and had discussions from colleagues and friends. Whereas, in the city of Rajkot, mixed number of M-Shoppers had stated their home to be the preferred place of shopping.

Implications: The M-Shoppers that did shopping from home took more time while shopping considering the relaxed environment at home. They mostly made the shopping decisions based on the opinions of the family members and their preferences. Products that had hedonic preferences or not of a basic necessity can be bought when surrounded with their friends or colleagues in the workplace, on the other hand the products that required the opinion of other family members or for the collective usage of a family as whole can be bought from home.

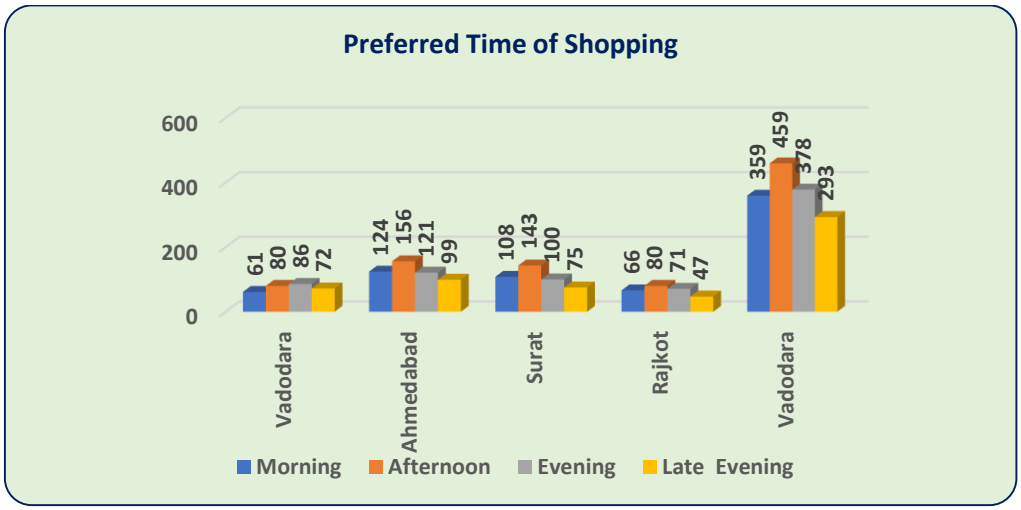
4.6: M-SHOPPERS' PREFERRED TIME OF MOBILE SHOPPING:

Since the M-Shoppers were from across the population, their preferred time of mobile shopping also varied based on their background of working and non-working. The mobile shopping provided the luxury of any time shopping to its users. Therefore, the M-Shoppers had their preferred time of mobile shopping as per their convenience. The researcher had analysed the data and results in the case of preferred time of shopping of selected Smartphone users in the table number 4.06.

Table Number: 4.6: City-wise Responses on Preferred Time of Shopping

Preferred Time of Shopping	Vadodara	Ahmedabad	Surat	Rajkot	Gujarat State
	(Number and Percentages of Selected M-Shoppers)				
Morning	61 (20.4)	124 (24.8)	108 (25.4)	66 (25.0)	359 (24.1)
Afternoon	80 (26.8)	156 (31.2)	143 (33.6)	80 (30.3)	459 (30.8)
Evening	86 (28.8)	121 (24.2)	100 (23.5)	71 (26.9)	378 (25.4)
Late Evening	72 (24.1)	99 (19.8)	75 (17.6)	47 (17.8)	293 (19.7)
Total	299 (100)	500 (100)	426 (100)	264 (100)	1489 (100)

Graph Number: 4.10: City-wise Responses on Preferred Time of M- Shopping



The table number 4.6 show cases the data analysis on preferred time of shopping which revealed following facts: In the city of Vadodara, approximately equal number of M-Shoppers were shopping in the evening, afternoon, and Late evening. In the city of Ahmedabad, Surat and Rajkot, most of the mobile shoppers preferred afternoon for their mobile shopping. The time of late evening contributed less preferred time by the mobile shoppers the M-Shoppers of Ahmedabad, Surat and Rajkot respectively. Overall, the preferred time for m-shopping was found to be afternoon by 30.8 per cent of M-Shoppers in all. Which implies that most of the M-Shoppers find afternoon to be the suitable time to do the online shopping considering the leisure time they get after completing the required duties in the morning time. M-Shoppers from their workplace also do these kinds of activities before and after lunch. Late evening shopping was the least preferred shopping time by the 19.7 per cent M-Shoppers among the M-Shoppers considering the mindset of the M-Shoppers. Late night especially before the bedtime, M-Shoppers less likely to make a purchasing decision unless it was of having some hedonic preferences.

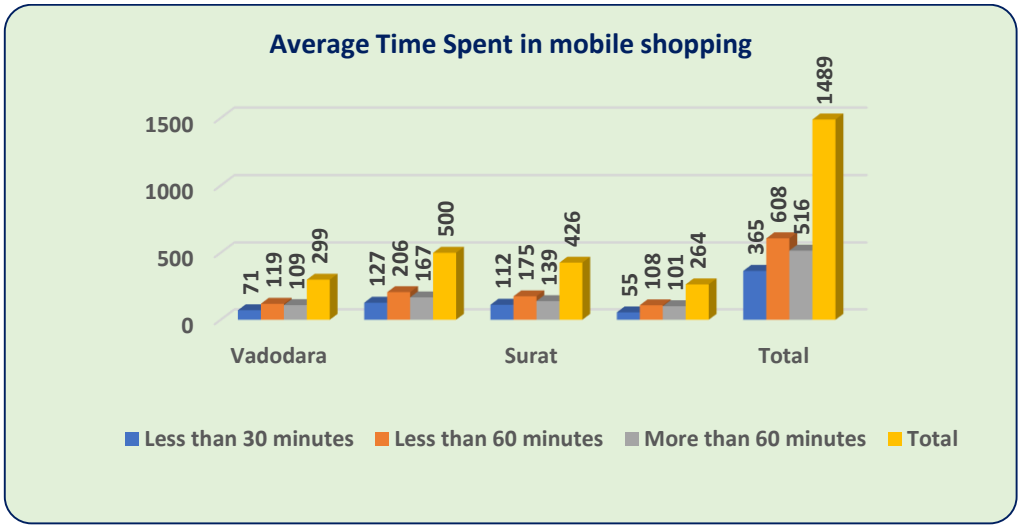
4.7: M-SHOPPERS' AVERAGE TIME SPENT IN MOBILE SHOPPING:

This study had a wholesome focus on what M-Shoppers do and don't. The study analysed the total time that could be afforded by the M-Shoppers for the sake of mobile shopping. Since the smartphone gave the convenience of shopping at their preferred time and place, if the mobile shoppers were not able to complete the shopping, they could save products in the shopping cart and finish the shopping at later point. The available time of the M-Shoppers to do the mobile shopping online was influenced by the various factors such as their work nature, commitment with the other activities, family responsibilities and the type of the mobile data they had in their smartphones. The researchers had analysed the data and results in the case of average time spent in mobile shopping in the table number 4.7.

Table Number: 4.7: City-wise Responses on Average Time Spent in Mobile Shopping

Average Time Spent in Mobile Shopping	Vadodara	Ahmedabad	Surat	Rajkot	Gujarat State
	(Number and Percentages of Selected M-Shoppers)				
Less than 30 Minutes	71 (23.7)	127 (25.4)	112 (26.3)	55 (20.8)	365 (24.5)
Less than 60 Minutes	119 (39.8)	206 (41.2)	175 (41.1)	108 (40.9)	608 (40.8)
More than 60 Minutes	109 (36.5)	167 (33.4)	139 (32.6)	101 (38.3)	516 (34.7)
Total	299 (100)	500 (100)	426 (100)	264 (100)	1489 (100)

Graph Number: 4.11: City-wise Responses on Average Time Spent in Mobile Shopping



The data analysis from the table number 4.7 and graph number 4.9 on average time of shopping revealed following:

In all the selected cities in Gujarat i.e. Vadodara, Ahmedabad, Surat and Rajkot, most of the M-Shoppers (40.8 Per cent) preferred shopping in less than 60 minutes.

These M-Shoppers mostly engaged in any online cash transfer, booking a travel ticket or a movie show. The most M-Shoppers who engaged in any online shopping activities using the mobile applications less than 60 minutes were the users who accessed the mobile shopping applications in the workplace environment, and travellers who engaged in business trips. In few cases, the M-Shoppers who accessed the mobile shopping applications in home were the people who were not the frequent travellers and used the shopping time to buy any household items, around 33 to 38 per cent mobile shoppers spent more than 60 minutes in Vadodara, Ahmedabad, Surat and Rajkot. In overall, there were about 34.7 per cent M-Shoppers engaged themselves in the mobile shopping activities for more than 60 minutes for one-time shopping activity. These M-Shoppers mostly use their time in shopping the items that were innovative, and the products that were usually not available in offline market.

They compared the similar products online by going through various shopping applications as well as the products that were identical with their characteristics. They invested a lot of times in researching a product before making the buying decision.

In case of all selected cities more or less percentage of M-Shoppers who were spending less than 30 minutes, were equal in number.

In overall, 24.5 per cent of the M-Shoppers used the mobile shopping applications less than 30 minutes They made use of the facility of the points earned in other shopping activities and spend them on the go.

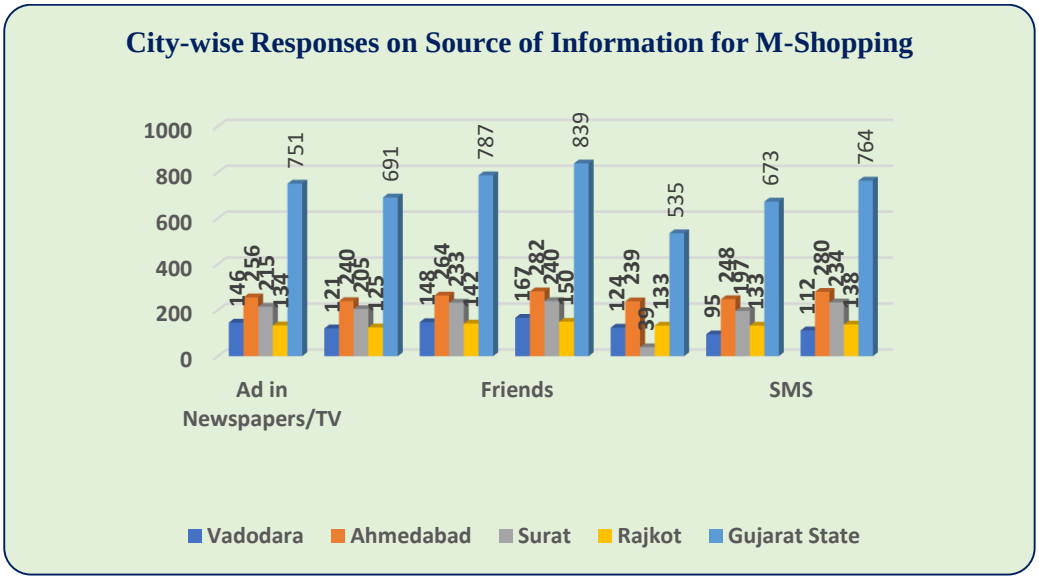
4.8: M-SHOPPERS' SOURCE OF INFORMATION FOR M-SHOPPING:

M-Shoppers were motivated to do the mobile shopping or idea of doing shopping by getting exposed to the external influences such as ads in the newspapers and TV, hoardings, family members and friends. The researchers had analysed the data and results in the case of source of information of selected Smartphone users and given below from table number no. 4.8

Table Number: 4.8: City-wise Responses on Source of Information for M-Shopping

Sources of Information	Vadodara	Ahmedabad	Surat	Rajkot	Gujarat State
Ad in Newspapers/TV	146 (48.8)	256 (51.2)	215 (50.5)	134 (50.8)	751 (50.4)
Hoardings	121 (40.5)	240 (48.0)	205 (48.1)	125 (47.3)	691 (46.4)
Family Members	148 (49.5)	264 (52.8)	233 (54.7)	142 (53.8)	787 (52.9)
Friends	167 (55.9)	282 (56.4)	240 (56.3)	150 (56.8)	839 (56.3)
Colleagues	124 (41.5)	239 (47.8)	39 (09.2)	133 (50.4)	535 (35.9)
E-mail	95 (31.8)	248 (49.6)	197 (46.2)	133 (50.4)	673 (45.2)
SMS	112 (37.5)	280 (56.0)	234 (54.9)	138 (52.3)	764 (51.3)

Graph Number: 4.12: City-wise Responses on Source of Information for M-Shopping



The table number 4.8 showcases the source of mobile shopping of the M-Shoppers from various selected cities of Gujarat provided following findings. In case of the Vadodara city most of the M-Shoppers (55.9 per cent) got the information through their friends; followed by family members (49.5 per cent). 48.8 per cent came to know the mobile shopping information from Newspapers and TV. 41.5 per cent M-Shoppers got the information by their colleagues. Ahmedabad, Surat and Rajkot had also followed the similar trend.

Overall, in all the selected cities in Gujarat, mobile shopping information was mostly shared by friends (56.3 per cent), followed by family members (52.9 Per cent). Mobile short messages (51.3 Per cent) also played vital role in passing the mobile shopping information to the mobile shoppers. Friends also (56.3 per cent) played an important role in the source information to the other M-Shoppers. Friends in their conversation discussed the new products in the market, any discounts or sales programmes that were happening online, and they also encouraged the M-Shoppers to try new shopping applications based on their experience. Followed by friends, family members were the key drivers in knowing the information on the mobile shopping applications.

M-Shoppers discussed with the family members on the mobile shopping activities especially when they buy any household items, groceries, or any utilities. When more than one mind combined together, new suggestions also popped-up along with new shopping ideas. SMS and ads in newspapers or TV were the other key drivers for the mobile shopping. Whenever a grand sale was happening, it had been advertised in a big way on the first pages of the newspapers.

The special columns or articles in newspapers about the new digital technologies or any new trend on online marketing also induced the M-Shoppers to try the new mobile shopping applications available. SMS were very handy and easy to operate. Most advertisements that came in SMS also had an URL that would lead to the mobile shopping applications. SMS provided easy access to the mobile shopping world than any other medium could do. Hoardings and e-mails were visual inducers in driving the mobile shopping intention. It flashed the information to the M-Shoppers on the mobile shopping applications and the new offers.

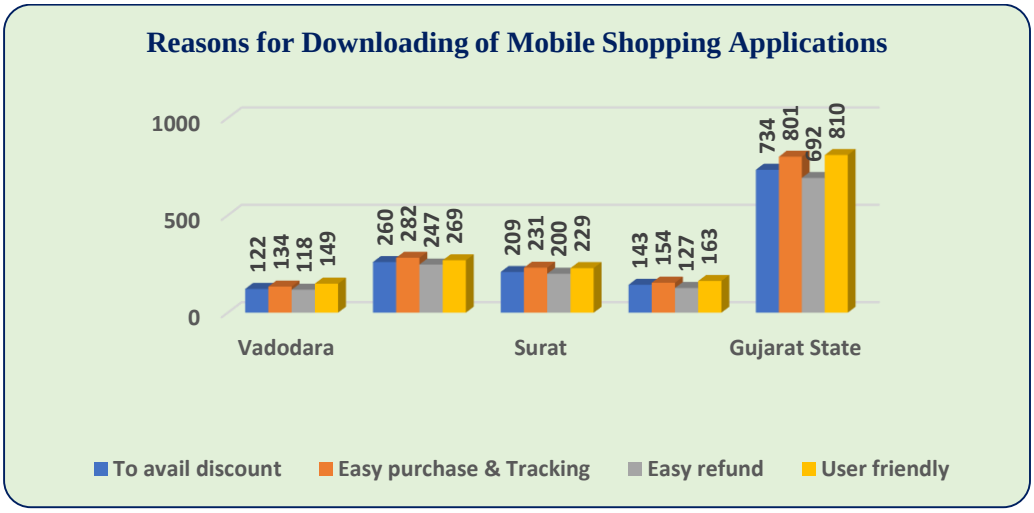
4.9: M-SHOPPERS' REASONS FOR DOWNLOADING OF M-SHOPPING APPLICATIONS:

Even though there was an option of doing shopping on the website itself, M-Shoppers still downloaded mobile shopping applications developed by the sellers. There were a lot of drivers that encourage M-Shoppers to download the mobile applications on smartphones such as, availing discount, easy purchasing and tracking, easy refund and user friendly. The researchers had analysed the data and results related to reasons for downloading mobile applications in the smartphones given in table number no. 4.19 below.

Table Number: 4.9: City-wise Responses on Reasons for Downloading Mobile Shopping Applications

Reasons for Downloading a Mobile Shopping App	Vadodara	Ahmedabad	Surat	Rajkot	Gujarat State
To avail discount	122 (40.8)	260 (52.0)	209 (49.1)	143 (54.2)	734 (49.3)
Easy purchase & Tracking	134 (44.8)	282 (56.4)	231 (54.2)	154 (58.3)	801 (53.8)
Easy refund	118 (39.5)	247 (49.4)	200 (46.9)	127 (48.1)	692 (46.5)
User friendly	149 (49.8)	269 (53.8)	229 (53.8)	163 (61.7)	810 (54.4)

Graph Number: 4.13: Reasons for Downloading of Mobile Shopping Applications



The table number 4.9 and graph number 4.11 are displaying the reason for downloading mobile shopping apps revealed the following findings from the various selected cities of Gujarat: Major contributor for the reason for downloading was user friendliness (54.4 per cent) among the mobile shoppers. Since it was all about mobile commerce and shopping on the go, user friendliness was a key driver for downloading any shopping applications. Easy to handling or navigating a shopping application was found a must.

M-Shoppers were ready to uninstall a shopping application if it was a an unfriendly and much complicated to understand the menu or any other navigation options. If the images were not clear and unable to zoom and had a closure look on the products, M-Shoppers would not get encouraged to use the applications. In the cities of Ahmedabad, 56.4 per cent the cause of easy purchase and tracking induced the downloading mobile shopping apps followed by user friendly (53.8 per cent). To avail discount (52 per cent) shared the third reason for downloading mobile shopping apps. In the city of Vadodara, easy purchase and tracking (44.8 per cent) contributed the second reason for downloading mobile commerce applications followed by availing discount (40.8 per cent). User friendliness of mobile apps contributed second place next to easy purchase and tracking. Overall, 'easy refund' was the most preferred reason to download a mobile application by 53.5 per cent M-Shoppers, followed by 'to avail discount' which was the preferred reason by 50.7 per cent respondent. Easy purchase and tracking and user-friendliness, were found the third most common drivers to download the mobile shopping applications by 46.2 per cent M-Shoppers. There is always a gap between ordering and delivery, M-Shoppers were looking for an application in which they could track the order until it arrived the home. In-house mobile applications were easy tools to know the product delivery status within shorter clicks than the online sites. Availing additional discount was another key driver to download the mobile shopping applications.

Mobile shoppers always looked for the right time to avail the discount. When they find out, downloading the mobile shopping applications gave the additional benefits, they never missed the chance of downloading the applications. Most mobile shopping applications offered eye catching discounts that entices M-Shoppers to install the mobile applications and use them.

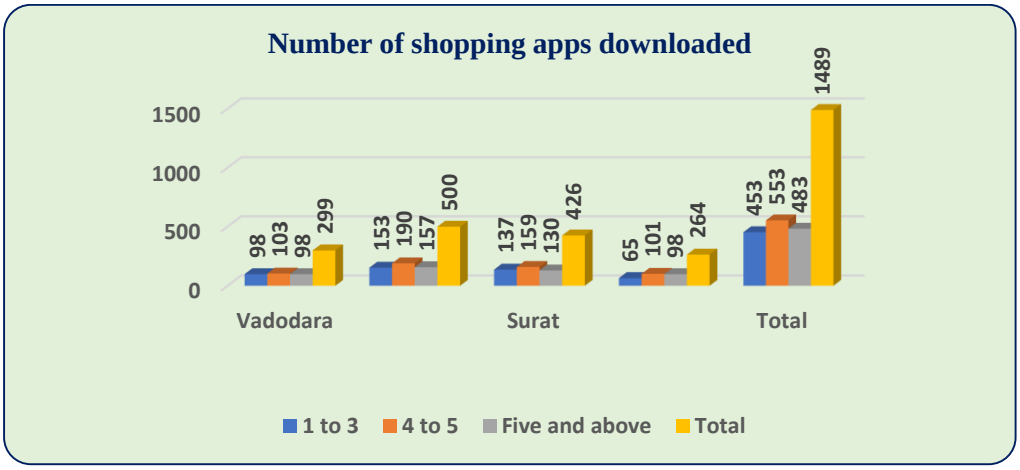
4.10: M-SHOPPERS' RESPONSES ON DOWNLOADING OF NUMBER OF M-SHOPPING APPLICATIONS:

Since there were a lot of key players in the mobile shopping applications. M-Shoppers had varied options to download the multiple shopping applications. The M-Shoppers were asked about the number of shopping applications downloaded in their smartphones. The researchers had analysed the data and results related to the number of shopping applications downloaded in the smartphones of the M-Shoppers in table number no. 4.20 below.

Table Number: 4.10: Selected M-Shoppers' City-wise Responses on downloading of Number of M-Shopping Applications

Number of Downloaded Shopping Apps	Vadodara	Ahmedabad	Surat	Rajkot	Gujarat State
	(Number and Percentages of Selected M-Shoppers)				
1 to 3	98 (32.8)	153 (30.6)	137 (32.2)	65 (24.6)	453 (30.4)
4 to 5	103 (34.4)	190 (38.0)	159 (37.3)	101 (38.3)	553 (37.1)
Five and above	98 (32.8)	157 (31.4)	130 (30.5)	98 (37.1)	483 (32.4)
Total	299 (100)	500 (100)	426 (100)	264 (100)	1489 (100)

Graph Number: 4.14: Selected M-Shoppers' City-wise Responses on downloading of Number of M-Shopping Applications



The table number: 4.10 and graph number 4.12 showed the data analysis on number of shopping apps downloaded the revealed following points: In case of all of the city's majority of M-Shoppers were having 4 to 5 applications in their phone. In the city of Ahmedabad, 38 per cent of the mobile shoppers downloaded 4 to 5 number of apps, followed by that 31.4 per cent M-Shoppers downloaded five and above shopping apps.

Slightly, lower than that, 30.6 per cent of M-Shoppers downloaded 1 to 3 number shopping apps. In case of city of Surat& Rajkot similar trend was seen.

Overall, in all selected cities in Gujarat, 37.1 per cent M-Shoppers had downloaded four to five applications while 32.4 percent M-Shoppers had downloaded more than five mobile shopping applications in their smartphones.30.4 percent shoppers were having 1 to 3 applications in their phones. Considering the offerings provided by the different mobile shopping applications, and the option of wide range of products, M-Shoppers had downloaded more than five shopping applications.

The M-Shoppers that went through wide range of choices or options of a particular product mostly tend to download more than four to five applications. Another major driving factors for downloading multiple shopping applications were influences of their friends, colleagues, and family members. M-Shoppers, who had downloaded one to three mobile shopping applications in their smartphones were very much content with their shopping applications and they were satisfied with the services offered by the existing mobile shopping applications that did not give any room to think of the options of going to other applications. These M-Shoppers were the M-Shoppers who shop at least monthly once for any shopping needs. They were the consistent buyers for certain segments of the products such as household items.

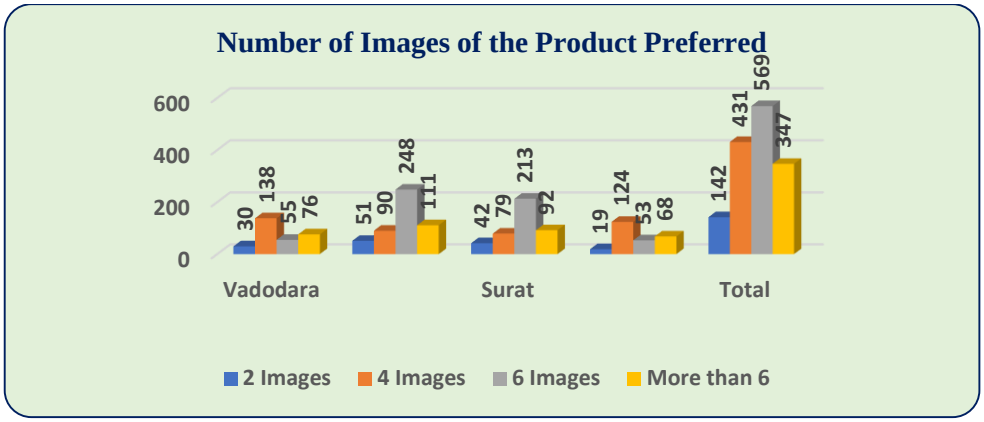
4.11: M-Shoppers' Responses on Minimum Number of Preferred Product Images for M-Shopping:

In mobile shopping, viewing and understanding of products happen virtually. Images were a vital source to know the products better. This study had a scope on analyzing the number of images preferred by the M-Shoppers while conducting mobile shopping. The researchers had analyzed the data and results related to the number of images preferred by the M-Shoppers while shopping in table number no. 4.21 below.

Table Number: 4.11: Selected M-Shoppers' City-wise Responses on Minimum Number of Preferred Product Images for M-Shopping

Number of Images of the Preferred Products	Vadodara	Ahmedabad	Surat	Rajkot	Gujarat State
(Number and Percentages of Selected M-Shoppers)					
2 Images	30 (10.0)	51 (10.2)	42 (09.9)	19 (07.2)	142 (09.5)
4 Images	138 (46.2)	90 (18.0)	79 (09.9)	124 (47.0)	431 (28.9)
6 Images	55 (18.4)	248 (49.6)	213(50.0)	53 (20.1)	569 (38.2)
More than 6	76 (25.4)	111 (22.2)	92 (21.6)	68 (25.8)	347 (23.3)
Total	299 (100)	500 (100)	426 (100)	264 (100)	1489 (100)

Graph Number: 4.15: Selected M-Shoppers' City-wise Responses on Minimum Number of Preferred Product Images In M-Shopping



The table number: 4.11 and graph number 4.13 analysed the number of images preferred while selecting a product revealed the following findings: In case of city of Vadodara and Rajkot, majority of M-Shoppers had opted for 4 images. but in case of Ahmedabad & Surat more than four images that is 6 images were opted for m-shopping. Overall, 38.2 per cent M-Shoppers preferred minimum six images of a product before making any final decision. Since the transactions happen online, it did not provide the luxury of touching or feeling the product before buying it. So, M-Shoppers preferred more images to understand the products in all its dimensions, textures and colours. More images created the possibilities of buying a product compared to the products that were having less images online. Images of a product were the key players in understanding the product better before proceeding to buy it. There were only 23.3 per cent of the M-Shoppers prefer more than six images, it showed that four to five images were sufficient enough to make a buying decision. Very least (9.5 per cent) M-Shoppers said two images were sufficient to know the product before buying it. Compared to other preferences, the proportion of m-shopping based on the two images were very less and negligible.

4.12: M-SHOPPERS USE OF M-SHOPPING APPLICATIONS:

The researcher had attempted to understand the usage of mobile shopping applications by the M-Shoppers. A list of widely known shopping applications was given to the M-Shoppers to know the level of knowledge of the M-Shoppers about the shopping applications. M-Shoppers had marked whether they were aware of the applications. If they were aware, whether they downloaded the applications, after downloading the applications whether they used the applications or not. The researchers had analyzed the data and results related to the list of M-Shopping applications used by M-Shoppers in table number no. 4.12 **(Please Refer Annexure –4, pp. 462)**.

Data on awareness of mobile apps, downloading and usage of the apps revealed the following findings: Maximum number of M-Shoppers have preferred Paytm (39.1 per cent), followed by Amazon (31.8 per cent) and Flipkart (31.2 per cent) as major players in the mobile shopping world. Most of the M-Shoppers said that they had used either of these applications for their mobile shopping need. These mobile shopping applications had a lot of network compared to other players in the segment of the mobile commerce. Paytm was widely accepted all across India and Gujarat is no exception in it. Paytm made a revolution in cashless transactions in all the levels of business right from the local shop to multi-brand sellers. It is very easy use in majority of the shop with a simple QR scanning. It also provided the option of wallets in which M-Shoppers could save their earned points as well as add cash to wallet. Paytm had amazing reward points that redeemable easily in various outlets and online shopping. Even it helped the M-Shoppers to use for small amount of cash transactions too. Amazon, a big brand in globe was no lesser player in India too. Amazon was known for its shopping festivals with huge discounts for any season. It had a huge warehouse capacity that helped to deliver the products seamlessly. Amazon had gained its good name with its quality products and good customer service. It guaranteed the cash back or product return in case of any faulty product go delivered. It had amazing tracking system on the delivery status of a product. Flipkart was widely used mobile shopping application among Indians. The brand name was well known among the mobile shoppers, and the M-Shoppers of this study as well. Flipkart was a widely used mobile application for any shopping need. Flipkart and Amazon were the rival in the mobile shopping industry compared to any other mobile shopping applications.

In the city of Vadodara, majority of the mobile shoppers were using Paytm, followed by Flipkart with 45.2 per cent M-Shoppers. Amazon was being used by the 37.1 per cent mobile shoppers. Bookmyshow & eBay had been used by 22.1 per cent mobile shoppers. Next to eBay, Shopclues & Myntra had equal share of 18.7 per cent, while Zomato had been used by 17.1 of the mobile shoppers.

In case of city of Ahmedabad, Paytm and Amazon were used almost equally in number. Flipkart had been used by 31 per cent of mobile shoppers. Bookmyshow, eBay, Myntra , Zomato and Snapdeal had been downloaded and used by around 20 to 30 per cent of the M-Shoppers. In the city of Surat, and Rajkot similar trend was found. Followed by the key players of Paytm, Amazon and Flipkart, Zomato was the other major popular mobile shopping applications among the M-Shoppers across four selected major cities of Gujarat.

Zomato had a very good network with the various food suppliers, fruit sellers and grocery market. Zomato had helped the M-Shoppers to get cooked or ready to eat food at any time that they required. It was known for its fast delivery within the stipulated time from when the order was placed.

4.13: M-SHOPPERS' EXPERIENCE ON PROBLEMS BEING FACED IN M-SHOPPING USING SMARTPHONES:

Since mobile shopping is a result of the development of information technology and done on handheld devices, there were numerous challenges in completing a transaction. Even after placing the order, there were practical difficulties in delivering the products on time. The M-Shoppers had been given the opportunity to voice out the challenges that they were facing while carrying out mobile shopping. This study had been further drilled down how much issues they had been facing whether the issue was always there, or only sometimes or they never had any issues. The researchers had analyzed the data and results related to the experience of problems being faced while shopping on Smartphone in table number no. 4.13**(Please Refer Annexure –4, pp. 466)**.

The problems faced while shopping revealed the following findings in the cities of Vadodara, Ahmedabad, Surat and Rajkot:

Majority of M-Shoppers had experienced connectivity issues sometimes in all of the selected cities, followed by M-Shoppers who never had any issues concerning the 'problem of disconnection/slow connectivity', whereas, very few M-Shoppers had always faced issues. The study had also shown that the maximum 48.8 per cent of M-Shoppers faced issue of data of smartphone getting hanged up frequently. While around 40 percent had never experienced any hanging issue with their smartphones. With reference to problem of downloading images, very few have experienced the issues. While considering the easy return of the product, Rajkot never experienced any challenges while Surat had experienced maximum issues. The result showed for "place of return, only exchange is option", M-Shoppers of all the selected cities never experienced any problems. For the parameter of "Price changes as soon as order is placed", again maximum number of M-Shoppers never experienced any problems in Rajkot. In the city of Vadodara, Ahmedabad, Surat and Rajkot, few M-Shoppers had issue of price getting changed after placing the order.

In the city of Ahmedabad and Surat 55.2 per cent mobile shoppers said that sometimes only the information on the websites were getting updated followed by Vadodara & Ahmedabad.

A very few M-Shoppers expressed that they find websites always not updated with the relevant information. While the "problems faced due to advertisement in between" was faced by similar number of M-Shoppers everywhere. With the problems related to delivery, most of the M-Shoppers never experienced any issues at all. Few M-Shoppers always experienced problems while products getting delivered. In the city of Ahmedabad & Surat majority of M-Shoppers said that sometimes only they had issue with cash on delivery. Issue on cash on delivery was majorly faced in Vadodara followed by Rajkot. In the analysis related to cancelling the placed order, similar percent of m-shopper in all of the cities never experienced any problems.

Overall, 10.4 per cent of the M-Shoppers stated that hanging of smartphone while shopping was always an issue. It happened to due to high resolutions of the images, capacity of the smartphone in storing the data, and speed of the RAM. M-Shoppers that do not maintain their smartphones by having proper anti-virus software, or cleaning up the residual files or having too many applications installed in their smartphones might cause the hanging issue. Rest all of the issues were faced by less than 10 percent M-Shoppers in selected cities.

Another challenge that M-Shoppers faced was delivery was not on time. Deliveries got delayed due to not having proper inventory on the stock availability and the mobile shopping applications were not updated of the unavailability of the product. Stock inventory must keep the uninterrupted delivery to the mobile shoppers. Address properly not updated by the M-Shoppers also caused the delay in delivery. Updating the proper address in the mobile shopping applications or informing the mobile shopping sites on the change of address was a must for a mobile shopper. Online sellers should have tap on the sales and delivery unit and ensured that the delivery was done on time as per commitment given to the M-Shoppers.

4.14: M-SHOPPERS' RESPONSES ON LOGGED IN M-SHOPPING APPLICATIONS:

Since mobile applications were downloadable software and had the option of keep it logged in, the researchers had analyzed the data and results related to always keeping shopping applications logged-in in table number no. 4.14.

Table Number: 4.14: Selected M-Shoppers' Responses on Logged in M-Shopping Applications

Selected Alternatives	Vadodara	Ahmedabad	Surat	Rajkot	Gujarat State
(Number and Percentages of Selected M-Shoppers)					
Yes	121 (40.5)	159 (31.8)	131 (30.8)	87 (33.0)	498 (33.4)
No	178 (59.5)	341(68.2)	295 (69.2)	177 (67.0)	991 (66.6)
Total	299 (100)	500 (100)	426 (100)	264 (100)	1489 (100)

Most of the M-Shoppers did not log in shopping apps all the time in all of the cities. Overall, 66.6 Per cent, mobile shopper did not prefer logged in all the times in mobile shopping, whereas others said that they would keep the shopping apps logged in all the time. Majority M-Shoppers that said not keeping the mobile applications always logged in were conscious about their mobile internet data plan. They turned on the mobile internet connection whenever needed, other than that they disconnected the internet connectivity. Since there were new low-cost mobile data plans available in the market now, it would be further improved.

4.15: M-SHOPPERS' RESPONSES ON MODE OF PAYMENT USED IN M-SHOPPING USING SMARTPHONES:

There were multiple options available to make the payment in mobile shopping such as cash, credit card, debit card, mobile wallet and Paytm. M-Shoppers made the payments in the mode that they were comfortable with. The researchers had analyzed the data and results related to Mode of Payment used while shopping on Smartphone, which is summarized in table number no. 4.15.

Table Number 4.15: Selected M-Shoppers' Responses on Mode of Payment Used for M-Shopping Using Smartphones

Mode of Payment	Vadodara	Ahmedabad	Surat	Rajkot	Gujarat State
	Number and Percentages of Selected M-Shoppers				
Cash	114 (38.1)	239 (47.8)	198 (46.5)	130 (49.2)	681 (45.7)
Credit Card	144 (48.2)	243 (48.6)	213 (50.0)	131 (49.6)	731 (49.1)
Debit card	139 (46.5)	117 (23.4)	105 (24.6)	54 (20.5)	415 (27.9)
Mobile wallet	183 (61.2)	359 (71.8)	301 (70.7)	185 (70.1)	1028(69.0)
Paytm	197 (65.9)	405 (81.0)	344 (80.8)	210 (79.5)	1156(77.6)
Rupay	23 (07.7)	17 (03.4)	15 (03.5)	07 (02.7)	62 (04.2)

The analysis on the mode of payment revealed the following findings. The most preferred way of payment among all the M-Shoppers were Paytm by 77.6 per cent and mobile wallet by 69 per cent of M-Shoppers. Paytm came in handy with a lot of reward points to the M-Shoppers and was easily usable in most shopping places with the simple QR scanning and it served as a wonderful alternative to cash and drives the habit of cashless payment among the M-Shoppers. Among the total M-Shoppers, 45.7 per cent M-Shoppers said yes to "cash" payment as their preferred mode of payment. It gave some breathing time to the M-Shoppers to arrange the cash for the product that they had ordered. It also assured if they were satisfied with the product they would proceed with the payment, otherwise, they had the option to return the product too. It became popular among the mobile shopper to order first and pay later on delivery.

Overall, across Vadodara, Ahmedabad, Surat and Rajkot, 49.1 per cent M-Shoppers said yes to preferred mode of payment is credit card. Since using credit card was easier for the registered users and no need to enter the customer details each time when the shop. Only password or OTP was required to make the payment through credit card.

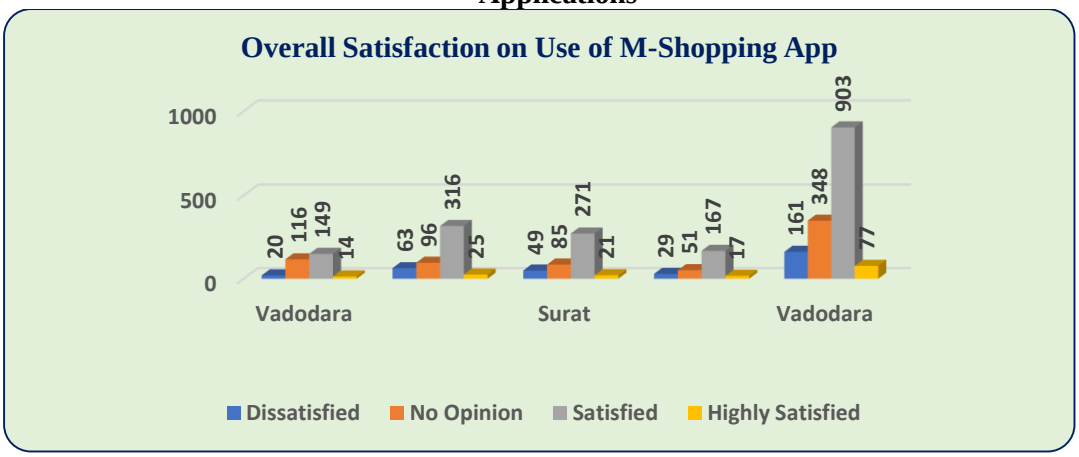
4.16: SELECTED M-SHOPPERS' OVERALL SATISFACTION ON USE OF M-SHOPPING APPLICATIONS:

The researcher had put efforts to know the overall satisfaction of the M-Shoppers related to the mobile shopping applications. The researchers had analyzed the data and results related to expectations of mobile shopping applications in table number no. 4.26 below.

Table Number 4.16: Selected M-Shoppers' Overall Satisfaction on Use of M-Shopping Applications

M-Shoppers' Experiences of Shopping Applications	Vadodara	Ahmedabad	Surat	Rajkot	Gujarat State
	(Number and Percentages of Selected M-Shoppers)				
Dissatisfied	20 (06.7)	63 (12.6)	49 (11.5)	29 (11.0)	161 (10.8)
No Opinion	116 (38.8)	96 (19.2)	85 (20.0)	51 (19.3)	348 (23.4)
Satisfied	149 (49.8)	316 (63.2)	271 (63.6)	167 (63.3)	903 (60.6)
Highly Satisfied	14 (04.7)	25 (05.0)	21 (04.9)	17 (06.4)	77 (05.2)
Total	299 (100)	500 (100)	426 (100)	264 (100)	1489(100)

Graph Number 4.16: Selected M-Shoppers' Overall Satisfaction on Use of M-Shopping Applications



The table number 4.16 and graph number 4.14 analyse on the expectations of mobile apps revealed the following findings:

Most of the M-Shoppers were satisfied with their mobile shopping applications, due to its ease of use, easy to navigation, the product description available in the mobile shopping applications, the images of the product with the zooming facility and display of the natural colour of the product in the applications.

There were few M-Shoppers who had no opinion about the mobile shopping applications and they remain neutral, and similarly few M-Shoppers were found highly dissatisfied with the mobile shopping applications due to the lagging while navigating the pages in the applications, space occupied by the multiple shopping applications in the mobile phone, unfamiliarity with the shopping applications, and not getting subsequent discounts in the downloaded applications.

There were a smaller number of M-Shoppers who acknowledged that they were highly satisfied with the experience of mobile shopping applications.

They found it extremely comfortable in shopping mobile applications and enjoy the facilities offered in it. Few M-Shoppers in all selected cities were dissatisfied with the expectations of mobile apps.

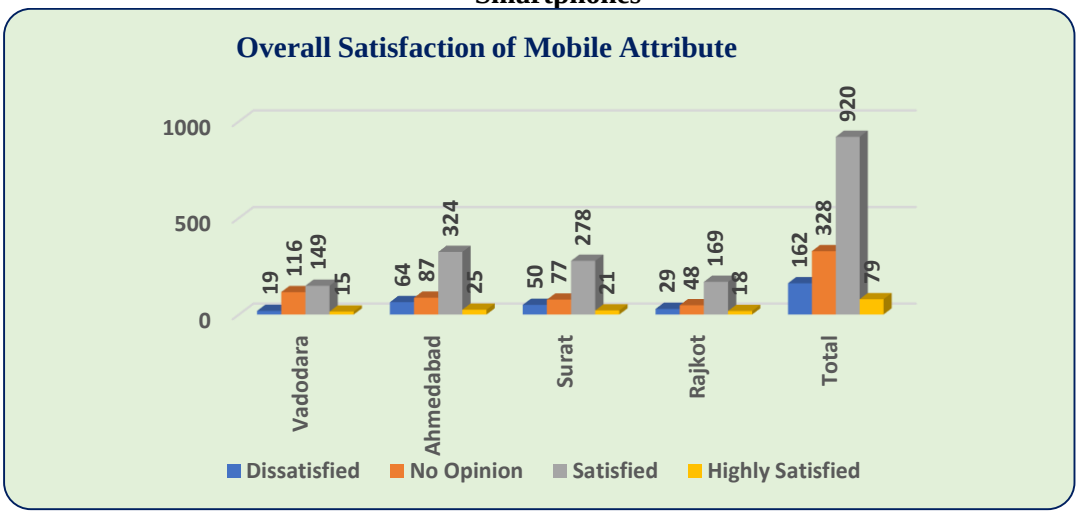
4.17: SELECTED M-SHOPPERS' OVERALL SATISFACTION OF MOBILE ATTRIBUTES OF SMARTPHONES:

M-Shoppers had rated the overall satisfaction with the attributes of smartphones. The researchers had analyzed the data and results related to meeting of expectations of mobile attribute in table number no. 4.17 below.

Table Number 4.17: Selected M-Shoppers' Overall Satisfaction of Mobile Attributes of Smartphones

M-Shoppers' Overall Satisfaction	Vadodara	Ahmedabad	Surat	Rajkot	Gujarat State
(Number and Percentages of Selected M-Shoppers)					
Dissatisfied	19 (06.4)	64 (12.8)	50 (11.0)	29 (11.0)	162 (10.9)
No Opinion	116 (38.8)	87 (17.4)	77 (18.1)	48 (18.2)	328 (22,0)
Satisfied	149 (49.8)	324 (64.8)	278 (65.3)	169 (64.0)	920 (61.8)
Highly Satisfied	15 (05.0)	25 (05.0)	21 (04.9)	18 (06.8)	79 (05.3)
Total	299 (100)	500 (100)	426 (100)	264 (100)	1489 (100)

Graph Number: 4.17: Selected M-Shoppers' Overall Satisfaction of Mobile Attributes of Smartphones



With the help of table number 4.17 and graph number 4.15, the analysis on the expectations of smartphone attributes revealed the following findings:

Among the total M-Shoppers, most of the M-Shoppers were satisfied with the attribute of the smartphones with related to mobile shopping experience. Their smartphone was compatible in handling the mobile shopping applications in terms of speed and the memory capacity of the smartphones. Display of the smartphones and good battery life that could sustain the long shopping hours at anytime and anywhere shopping were key factors for the satisfaction of the smartphone users. Only 10.9 per cent of the M-Shoppers stated that they were not satisfied with the attribute of the smartphone in relation with mobile shopping.

The important key factor for dissatisfaction was the performance of the smartphone such as lagging issue while carrying out the mobile shopping activity. Poor battery back-up and display of the screen also played a vital role in dissatisfaction of the M-Shoppers that do mobile shopping.

22 per cent M-Shoppers did not have any opinion about the attribute of the smartphones, & few M-Shoppers expressed that they were highly satisfied with the attribute of the smartphones in mobile shopping activities. They were happy with the natural colour display of the smartphone, memory capacity, battery back-up and RAM speed while performing the mobile shopping.

In the city of Vadodara, half of the mobile shoppers were satisfied with the expectations of the mobile apps, more M-Shoppers were satisfied with the expectations of mobile applications in Ahmedabad, Surat and Rajkot while a smaller number of M-Shoppers were satisfied in Vadodara. A very few M-Shoppers were dissatisfied with the smartphone attributes in all of the cities.

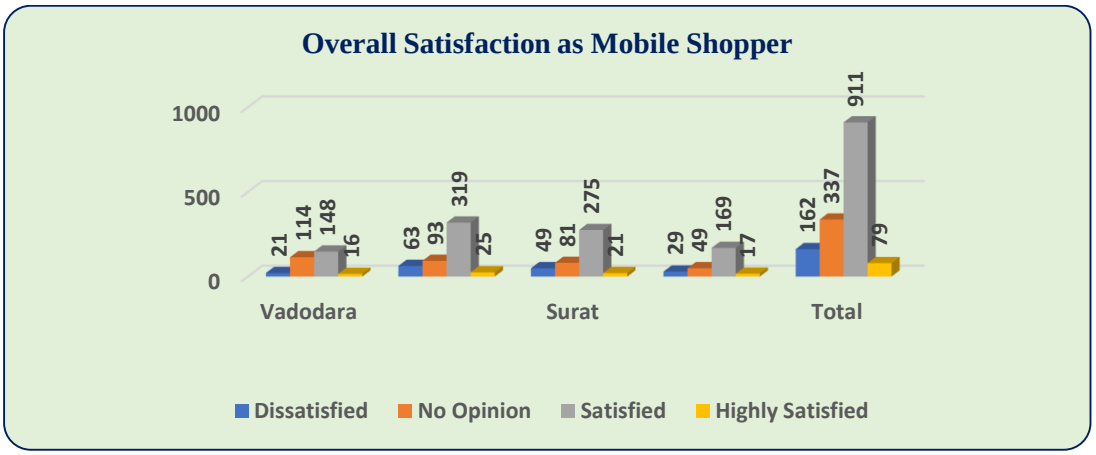
4.18: SELECTED M-SHOPPERS' OVERALL SATISFACTION AS MOBILE SHOPPER:

This research study showed the overall satisfaction level of the M-Shoppers in the mobile shopping experience. The researchers had analyzed the data and results related to overall satisfaction as mobile shopper in table number no. 4.18 below.

Table Number 4.18: Selected M-Shoppers' Overall Satisfaction As Mobile Shopper

M-Shoppers' Overall Satisfaction	Vadodara	Ahmedabad	Surat	Rajkot	Gujarat State
(Number and Percentages of Selected M-Shoppers)					
Dissatisfied	21 (07.0)	63 (12.6)	49 (1.5)	29 (11.0)	162 (10.9)
No Opinion	114 (38.1)	93 (18.6)	81 (19.0)	49 (18.6)	337 (22.6)
Satisfied	148 (49.5)	319 (63.8)	275 (64.6)	169 (64.0)	911 (61.2)
Highly Satisfied	16 (05.4)	25 (05.0)	21 (04.9)	17 (06.4)	79 (05.3)
Total	299 (100)	500 (100)	426 (100)	264 (100)	1489 (100)

Graph Number: 4.18: Selected M-Shoppers' Overall Satisfaction as Mobile Shopper



From the graph number 4.16 and table number 4.18 above, the analysis on the overall satisfaction of mobile shoppers revealed the following findings:

Majority of M-Shoppers stated that they were overall satisfied as a mobile shopper. They were satisfied with the quality of the mobile shopping applications and the attributes of the smartphones while performing the mobile shopping activities. Additionally, they were satisfied with the sellers in their service of the product delivery as on time, right products dispatched, tracking the consignment and the customer service offered by sellers. Only a few M-Shoppers stated that they were dissatisfied with the mobile shopping experience using the mobile shopping applications in the smartphone. It was caused due to the problem of internet connectivity in the smartphone, smartphone getting hanged up frequently, problems in downloading the images, return of the product was not user friendly, price getting changed as soon as the order was placed, information on the shopping applications were not updated, problems faced due to advertisements in between, delayed delivery, cash on delivery was not available, tracking the consignment was difficult and unable to cancel the order that was placed. Very few M-Shoppers were found highly satisfied with the overall experience as a mobile shopper.

There were few factors that play important roles in high customer satisfaction such as smartphone was useful for anytime shopping, smartphone reduced the physical search of the products, easy payment options in the mobile applications, usefulness of the applications to understand all the features of the products, easy to compare the products online, product suggestions helped to choose the better product, and other customer reviews helped in purchasing decision.

In the city of Vadodara, half of the mobile shoppers were overall satisfied with mobile shopping, in Ahmedabad, Surat and Rajkot more than half of the mobile shoppers were satisfied with overall experience in mobile shopping, though very few were highly satisfied with the overall experience in mobile shopping. Only Few M-Shoppers in were dissatisfied with the overall experience in mobile shopping.

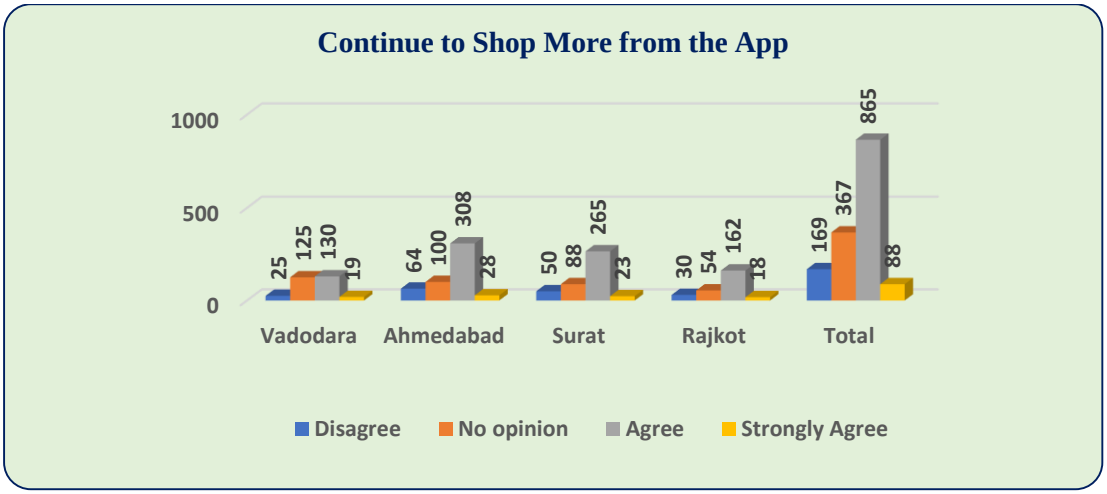
4.19: Selected M-Shoppers' Intention to Continue M-Shopping Using Mobile Applications of Smartphones:

The researchers had analyzed the data and results related to intention to continue to shop more from the mobile shopping application in table number no. 4.19 below.

Table Number 4.19: City-wise Responses on Intention to Continue M- Shopping

Selected Criteria	Vadodara	Ahmedabad	Surat	Rajkot	Gujarat State
(Number and Percentages of Selected M-Shoppers)					
Disagree	25 (08.4)	64 (12.8)	50 (11.7)	30 (11.4)	169 (11.3)
No opinion	125 (41.8)	100 (20.0)	88 (20.7)	54 (20.5)	367 (24.6)
Agree	130 (43.5)	308 (61.6)	265 (62.2)	162 (61.4)	865 (58.1)
Strongly Agree	19 (06.4)	28 (05.6)	23 (05.4)	18 (06.8)	88 (05.9)
Total	299 (100)	500 (100)	426 (100)	264 (100)	1489 (100)

Graph Number 4.19: City-wise Responses on Intention to Continue M-Shopping



From the table number 4.19 and graph number 4.17, the analysis on the intention of continuous usage of mobile shopping revealed the following findings:

Majority of the M-Shoppers positively stated that they would continue to do the shopping using mobile applications in smartphones. They made the decision on continuous shopping on mobile phone based on their previous experiences in the mobile shopping applications.

The sellers retain the mobile shoppers by providing rewarding points or gift coupons that were redeemable in the next purchase. Well established customer service could build good bond with the shoppers and wishing the M-Shoppers on their special occasions like birthdays or any other anniversaries could motivate the customers to do the shopping continuously. Care given post sales and getting feedback from the M-Shoppers could also form a success formula to win over the competitive edge. Only a few M-Shoppers stated that they did not have any intention to do the shopping continuously using the mobile shopping applications. Poor response from the sellers, low quality product received, different product got delivered than the ordered product, unstable internet connectivity, lagging smartphone could cause the M-Shoppers not to continue the mobile shopping in the smartphones. A very a smaller number of the overall M-Shoppers strongly expressed that they would continue to do the mobile shopping in the future. These M-Shoppers were extremely satisfied with the mobile shopping experience and did not want to discontinue the shopping on the smartphones. In the city of Vadodara, in comparison to Ahmedabad, Surat and Rajkot lesser number of m- shoppers agreed they would continue to shop more from the mobile apps. Only few M-Shoppers in all cities did not agree to shop more from the mobile apps.

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4.20: SELECTED M-SHOPPERS' RECOMMENDATIONS TO OTHER SHOPPERS FOR M-SHOPPING:

As a result of good experience in mobile shopping applications, the researcher attempted to know the M-Shoppers' intention to recommend others to persuade mobile shopping. The researchers had analysed the data related to recommending others to shop more from the mobile shopping application, in table number no. 4.30 below.

Table Number 4.20: Selected M-Shoppers' Recommendations to Other Shoppers for M-Shopping

Selected Criteria	Vadodara	Ahmedabad	Surat	Rajkot	Gujarat State
(Number and Percentages of Selected M-Shoppers)					
Disagree	24 (08.0)	63 (12.6)	50 (11.7)	29 (11.0)	166 (11.1)
No opinion	128 (42.8)	105 (21.0)	92 (21.6)	59 (22.3)	384 (25.8)
Agree	128 (42.8)	305 (61.0)	262 (61.5)	159 (60.2)	854 (57.4)
Strongly Agree	19 (06.4)	27 (05.4)	22 (05.2)	17 (06.4)	85 (05.7)
Total	299 (100)	500 (100)	426 (100)	264 (100)	1489 (100)

Graph Number 4.20: Selected M-Shoppers' Recommendations to Other Shoppers for M-Shopping

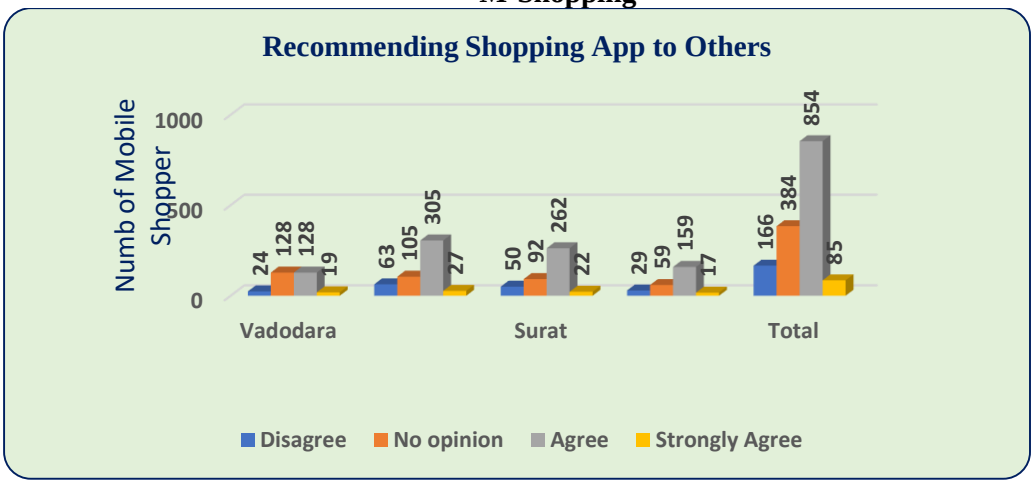

Table no. 4.20 and graph number 4.18 helped to analyse the recommendations of mobile shoppers on mobile shopping revealed the following findings:

Most of the M-Shoppers were ready to recommend shopping from mobile app to others, in would recommend others to mobile shop. Only a few strongly disagreed to recommend to others. Overall, more than 60 per cent of the M-Shoppers stated that they would recommend others also to do shopping using mobile applications in the smartphones. These M-Shoppers were keen to share the feedback of any mobile shopping applications with their friends or relatives or colleagues and persuade them to do the shopping in the smartphones.

Word of mouth was stronger than the advertisements and could spread the positive information about the mobile shopping experience and invite others also to enjoy the shopping experience. There were few M-Shoppers who were not satisfied with the mobile shopping and hesitant to recommend others to indulge in mobile shopping activities. Few M-Shoppers stated that they would not recommend others to do the shopping in mobile applications due to their dissatisfaction in the mobile shopping. 5.7 per cent M-Shoppers expressed that they would strongly recommend others to involve in the mobile shopping activities. These were the M-Shoppers that serve as strong ambassadors of mobile shopping. They also pulled others into mobile shopping activities by strongly recommending the shopping applications in which they had the good shopping experience. Whenever any new announcement came on the grand sales, these M-Shoppers immediately shared with their acquaintances to reap the benefits of the mega sales.

4.21: SELECTED M-SHOPPERS' EXPECTATIONS' ON QUALITY OF MOBILE APPLICATIONS (MAQ) & ATTRIBUTES OF SMARTPHONES IN MOBILE SHOPPING:

This section deals with the expectations of M-Shoppers using smartphone and mobile shopping applications. Quality of Smartphone Attributes and Quality of Mobile Applications were measured with reference to perceived usefulness (PU), Perceived Ease of Use (PE), Trust (TR), and Price (PR). These responses are given in the table number 4.21 **(Please Refer Annexure – 4, pp. 467)**.

The table number 4.21 has analysed the expectations of M-Shoppers on perceived usefulness of mobile application in the selected cities viz., Vadodara, Ahmedabad, Surat and Rajkot respectively.

It was found that 'Smartphone is useful for anytime shopping' was considered important by 75.9 per cent M-Shoppers' in Vadodara, which was more in comparison to other cities considering figure of 67.4 per cent M-Shoppers' of Ahmedabad, 67.4 per cent of Surat and 65.9 per cent M-Shoppers' in Rajkot. Regarding the 'Easy payment options in the mobile shopping applications' M-Shoppers' of Surat, Rajkot and Ahmedabad cities were having similar response pattern that is around 81 percent of them had found it important while 74.9 per cent M-Shoppers' of Vadodara city had found it important. With regard to 'Wishlist helping to do the shopping later', these figures of M-Shoppers' who had remained with it as neutral were Ahmedabad (30.1) , Vadodara (24.4), Surat (24.4) and Rajkot (25.8) whereas others had agreed with its importance. M-Shoppers' of Ahmedabad (83.4 per cent), Surat (84 per cent) and Rajkot (85.2 per cent) cities reported that the smartphone applications have barrier to Indian languages which is really important and this figure for the Vadodara city was relatively less as 65.9 per cent in comparison to other cities.

With regard to another statement of the expectation on 'Unclear image affects the shopping decision', M-Shoppers' in Rajkot were found highest in number in agreement to it compared with figures of other cities, of the Gujarat State. Majority of M-Shoppers in each of the selected cities in the State of Gujarat with regard to statement viz., "video is helpful in knowing the features of the products" found it as important while few were neutral with it. In comparison to Vadodara & Surat, large number of M-Shoppers from Ahmedabad & Rajkot cities had conveyed their importance for expectation viz., 'Paid applications are better than free shopping applications. Around 20 per cent of Ahmedabad, Surat and Rajkot and 29 percent M-Shoppers' of Vadodara were indifferent and neutral with it. A very few M-Shoppers' of Vadodara considered paid applications as better than free shopping applications as least important.

All the other remaining statements concerning expectation used to measure perceived importance towards perceived usefulness of smartphone application quality revealed similar results considering the fact that around 70 to 80 percent of them had found it 'important' and only 1 to 2 percent of them had found it 'Unimportant,' with a slight variation of 2 to 5 percent among selected cities in the State of Gujarat.

In case of statement concerning expectation that 'Mobile shopping applications are useful in saving shopping time'; 'Suggestion is useful in selection of the products' ; 'Similar product should display on application along main search'; 'Sellers accept product returned by shoppers'; 'Easy refund of price encourages online shopping'; 'Sellers refund price as they receive product back'; and 'EMI options affect shopping decision', results of data analysis revealed that majority of M-Shoppers of Ahmedabad, Surat and Rajkot cities had reported it as 'Important' , M-Shoppers of Vadodara too had found these criteria important, but the figures were higher in number than other cities. A very small number of M-Shoppers of all selected cities had reported these statements as 'Unimportant'. In case of criterion viz., 'Stock availability influences shopping decision'; 'Downloading mobile shopping applications gives first time benefits'; 'Quick response of M-Tailors affect shopping decision'; 'Shoppers check information on sellers in mobile shopping applications' and Phone number of delivery agent provided help' large number of them were found in near to equal numbers who had conveyed it as 'Important' from all the selected cities of Gujarat.

The table number 4.22**(Please Refer Annexure –4, pp. 470)**. shows the results of data analysis of the expectation of M-Shoppers' towards Perceived Ease of Use of Mobile Application which had mainly revealed following.

With regard to the 'Expectation of downloading shopping applications provides better shopping experience', large number of them (70 to 75 percent) had found it as 'Important' in each of the selected cities of the State of Gujarat. In all four cities except Vadodara, nearly, 75 percent M-Shoppers had favourably agreed with 'Shoppers feeling proud in mobile shopping' as 'Important'.

Overall, researcher found a similar trend on perceived ease of use of smartphone applications, where 3/4th M-Shoppers had expressed higher expectation and none of them had reported it as 'Unimportant'. The response pattern of M-Shoppers of the Vadodara city was slightly different trend than other cities of the State of Gujarat. A very large number of the M-Shoppers of each of the selected cities of the State of Gujarat had agreed with statement that 'Shoppers enjoy the product description available in mobile applications' as 'Important'.

The number of M-Shoppers who had agreed with attractive layout of mobile applications involves shoppers as important was slightly higher in Rajkot city compared with other selected cities of the State of Gujarat. In case of another statement viz., 'Attractive layout of mobile applications involves shoppers' was reported as 'Important' by big number of M-Shoppers in all selected cities of the State of Gujarat, and percentages of M-Shoppers of Rajkot city was slightly higher than other cities of the State of Gujarat.

In case of remaining selected statements used to measure perceived ease of use of mobile applications, approximately equal number of M-Shoppers, had revealed it as 'Important' whereas very few of them had reported as 'Neutral' and very a smaller number of them had reported it as 'Unimportant'.

The table number 4.23**(Please Refer Annexure –4, pp. 472)**. is the outcome of data analysis of the M-Shoppers' expectations on Trust (TR) with reference to quality of mobile applications in the selected cities viz., Vadodara, Ahmedabad, Surat and Rajkot of the Gujarat State.

A very large number of the M-Shoppers of Vadodara were having 'Important' expectations on selected statements and hardly any one of them had reported it 'unimportant' and few of them were 'Indifferent or Neutral' to it.

A big number of M-Shoppers of Ahmedabad, Surat & Rajkot cities had conveyed similar expectations towards trust on quality of mobile phone applications that is viz., mobile applications should be trustworthy as it involves value transactions with private information. Everyone wants security so none found it as 'Unimportant', and few of them were 'Indifferent or Neutral' to it even in this case too.

Overall, it was found that in case of trust and quality of smartphone applications majority of M-Shoppers had reported it as risky.

The table no. 4.24 **(Please Refer Annexure –4, pp. 474)**.has revealed results of data analysis of expectations of M-Shoppers' on Price (PR) of Mobile Application Quality (MAQ) in the selected cities viz., Vadodara, Ahmedabad, Surat and Rajkot in the State of Gujarat.

In case of the Vadodara city, most of the M-Shoppers had conveyed price as an important factor of M-Shopping. Delivery cost & high price of online products too influences intention of the M-Shoppers for M-Shopping.

81.3 percent of them reported that online products are having hidden cost whereas 30 percent of them were indifferent with delivery cost, that means, though it is important but they might not consider it above the quality of product or service.

Nearly, 75 percent M-Shoppers of Ahmedabad, Surat and Rajkot cities too reported similar trend, for delivery cost as important whereas high cost of online products and hidden cost of online products too were found as important by almost all of the M-Shoppers from selected cities in the State of Gujarat.

M-Shoppers of all four selected cities also conveyed that price is not that important and M-Shopping through shopping applications have hidden cost, and delivery cost affects their shopping decisions.

The table number 4.25**(Please Refer Annexure –4, pp. 475)** offers outcome of the results of data analysis concerning expectations on Perceived usefulness (PU) of Mobile Attributes (MA) of the M-Shoppers' in the selected cities of Vadodara, Ahmedabad, Surat and Rajkot in the State of Gujarat.

In case of Vadodara city, most of the M-Shoppers favourably conveyed 'Importance' on perceived usefulness of mobile attributes, while in case of 'Batteries' contribution to M-Shopping' and 'Smartphone reduces the physical search', more than 80 per cent of them reported it as important attribute of smartphone in M-Shopping.

In case of Ahmedabad city, 70 per cent of them had reported 'natural colour display' as important whereas other remaining criteria were found as important by more than 80 percent of M-Shoppers. "Smartphone batteries give enough time for M-Shopping was expected as 'Important' by more than 90 percent of them.

Most of the M-Shoppers of Surat too had reported favourably for expectation from perceived usefulness as 'Important'. 'Zooming feature helps to know product well' was found as 'Important' by 88 percent of M-Shoppers.

Majority of M-Shoppers of Rajkot city too had also favourably shared that all the selected criteria were perceived as useful, in which 'Batteries' were found as 'Important' by The table number 4.26 **(Please Refer Annexure –4, pp. 476)**. has presented results of analysis of collected primary data on M-Shoppers' expectations on Perceived Enjoyment (PE) of Mobile Features or Attributes of smartphones who were conveniently drawn from the selected cities viz., Vadodara, Ahmedabad, Surat and Rajkot from the State of Gujarat.

A very large number of the M-Shoppers in Vadodara city conveyed high perceived importance for Screen Size and Zooming features of mobile considering his or her expectation about perceived enjoyment in aforesaid mobile attributes as 'Important'. But, simultaneously around 30 per cent of M-Shoppers were found 'Indifferent or Neutral' for it.

Most of the M-Shoppers in Ahmedabad city had found enjoyment as important aspect, zooming feature (87 percent) and 83 percent of them had accepted the fact that that they really enjoy M-Shopping using smartphone.

The researcher had received similar trend and results in Surat and Rajkot cities of the Gujarat State. The table number 4.27**(Please Refer Annexure –4, pp. 477)** has revealed results of data analysis of expectations of M-Shoppers' on Trust (TR) on Mobile attributes among the M-Shoppers' in the selected cities of Vadodara, Ahmedabad, Surat and Rajkot in the State of Gujarat.

High number of the M-Shoppers in Vadodara city stated Trust as an 'Important' element of mobile attributes, but sizable number of M-Shoppers were also found either as 'Neutral' or 'Indifferent' compared with results of various other cities of the Gujarat State. Ahmedabad city had comparatively revealed a small number of indecisive M-Shoppers and majority of them had shared his or her expectations for 'Trust' as an 'Important'.

The table number 4.28 **(Please Refer Annexure –4, pp. 478)** has displayed results of data analysis of collected primary data on M-Shoppers' expectations on Price (PR) of Mobile Feature or Attribute of smartphones in the selected cities viz., Vadodara, Ahmedabad, Surat and Rajkot from the State of Gujarat.

Price is important for all, and M-Shoppers of Vadodara city had shared that Price of smartphones determine its quality and features is 'Important', and none of them had responded it as 'Unimportant'. But, in case of selected statement viz., 'Accessory influence shopping and Price effects speed of phone during shopping, there were few M-Shoppers who had stated that it is 'Not Important' which meant that speed & accessories does not influence their concerns in case of M-Shopping. Similar trend was found in each of the selected cities of the Gujarat State.

Regarding the experience of M-Shoppers on Perceived Usefulness (PU) of Mobile Application Quality (MAQ) in the selected cities of Vadodara, Ahmedabad, Surat and Rajkot of the Gujarat State.

In case of the Vadodara city, large number of M-Shoppers had experienced their perceived usefulness of Mobile Application Quality as 'Fair' and only in case of few selected statements viz., 'Unclear image affects the shopping decision'; Sellers are approachable through mobile shopping applications', M-Shoppers had reported their experienced as 'Good'.

There were around 25 to 30 percent M-Shoppers, who had reported as 'Poor' experience with reference to perceived usefulness of mobile attributes and similar trend was found in case of each of the selected cities viz., Vadodara, Ahmedabad, Surat and Rajkot of the Gujarat State.

4.22: SELECTED M-SHOPPERS' EXPERIENCES ON QUALITY OF MOBILE SHOPPING APPLICATIONS & ATTRIBUTES OF SMARTPHONES IN MOBILE SHOPPING:

This part has dealt with the reported shared experiences of M-Shoppers in use of smartphones for mobile shopping applications to make online m-shopping.

The number and percentages of M-Shoppers based on their responses are presented in table number 4.29 to 4.62 as follows.

The table number 4.29 **(Please Refer Annexure –4, pp. 479)** has analysed the Experience on Perceived Usefulness (PU) of Mobile Application Quality (MAQ) among the M-Shoppers' in the selected cities of Vadodara, Ahmedabad, Surat and Rajkot.

In Vadodara city, large number of M-Shoppers experienced Fair towards usefulness of Mobile Application Quality, only in few cases like, 'Unclear image affects the shopping decision'; Sellers are approachable through mobile shopping applications' M-Shoppers experienced Good. There were around 25 to 30 percent M-Shoppers, who had poor experience with reference to usefulness of mobile attribute and similar trend was seen in case of all of the cities of Gujarat.

The table number 4.30 **(Please Refer Annexure –4, pp. 482)** had analysed the Experience of M-Shoppers' on Mobile Application Quality (MAQ) and Perceived Ease of Use (PE) amongst the selected cities of Vadodara, Ahmedabad, Surat and Rajkot.

In case of Vadodara city, majority of M-Shoppers had fair experience regarding ease of use with reference to Mobile applications, while in case of 'Shoppers enjoy comparing the products online'; 'Shoppers feeling proud in mobile shopping'; 'Shoppers connect with other shoppers through chat'; 'Shoppers enjoy shopping on the smartphone' and 'enjoy the convenience of shopping on mobile applications' most of the M-Shoppers had Good experience. Less than 20 percent of M-Shoppers had poor experience regarding ease of use of mobile applications.

More than 80 per cent of the M-Shoppers of Ahmedabad had good experience regarding ease of use of mobile applications in 'Waiting for special offers and discounts to shop online'; 'Shoppers feeling proud in mobile shopping'; and 'Shoppers enjoy shopping on the smartphone' and in case of other criterion were also experienced good by majority of M-Shoppers in Ahmedabad.

Less than 20 per cent had Fair experience as well as poor experience there. Surat & Rajkot had also the similar trend like Ahmedabad.

The table number 4.31**(Please Refer Annexure –4, pp. 484)** has analysed the experience on mobile application quality (MAQ) and Trust (TR) among the M-Shoppers' in the selected cities of Vadodara, Ahmedabad, Surat and Rajkot.

In the city of Vadodara, M-Shoppers who had fair experience were more in number than the M-Shoppers who had good experience and there were 35 percent M-Shoppers who really had poor experience in case of 'Mobile shopping application are trustworthy'.

A different trend was seen in Ahmedabad, Surat and Rajkot, where majority of respondents had good experience towards Trust in Mobile application quality, less than 20 percent of M-Shoppers had fair and poor experience in these cities.

The table no. 4.32**(Please Refer Annexure –4, pp. 485)** has analysed the experience on mobile application quality (MAQ) and Price (PR) among the M-Shoppers' in the selected cities of Vadodara, Ahmedabad, Surat and Rajkot. Vadodara had a different trend, where half of the M-Shoppers had reported fair experience and less than stated that they had good experience. Other cities were having reverse trend where majority of M-Shoppers had good experience and equal number of M-Shoppers had fair & poor experience towards price of mobile application quality.

The table number 4.33**(Please Refer Annexure –4, pp. 486)** has analysed the experience on Perceived Usefulness (PU) of Mobile Attributes, among the M-Shoppers' in the selected cities of Vadodara, Ahmedabad, Surat and Rajkot of the Gujarat State. Vadodara city had revealed a different trend than Ahmedabad, Surat & Rajkot cities of the Gujarat State. In case of Vadodara city, there were large number of M-Shoppers who had reported 'Fair' experience towards perceived usefulness and 30 to 40 percent M-Shoppers had reported 'Good' experience only. Other cities had shown just reverse trend where large number of M-Shoppers had shared 'Good' experience and around 20 percent of them had reported only 'Fair' experience. Less than 20 per cent had shared 'Poor' experience towards perceived usefulness of mobile attributes.

The table number 4.34 **(Please Refer Annexure –4, pp. 487)** had reported results of reported experience on perceived enjoyment (PE) [MAQ AND MA] among the M-Shoppers' in the selected cities of Vadodara, Ahmedabad, Surat and Rajkot of the Gujarat State.

Around 40 to 50 percent M-Shoppers had reported 'Fair' experience in Vadodara city whereas 37 percent of them had shared 'Good' experience in perceived enjoyment experience of mobile attributes.

Ahmedabad, Surat & Rajkot cities too had revealed a similar trend where majority of M-Shoppers had reported 'Good' experience and average 15 percent of them had shared Fair' experience on perceived enjoyment of mobile attributes.

The table number 4.35**(Please Refer Annexure –4, pp. 488)** has reported results of data analysis of experience on Trust (TR) on Mobile attributes amongst the M-Shoppers' in the selected cities of Vadodara, Ahmedabad, Surat and Rajkot of the Gujarat State.

In Vadodara city, equal number of M-Shoppers had shared 'Poor & Fair' experience on Trust whereas a small number of M-Shoppers had shared 'Good' experience on Trust on mobile attributes.

Ahmedabad, Surat and Rajkot cities had alike other results had revealed again different trend, where large number of M-Shoppers had stated 'Good' experience and equal number of M-Shoppers had shared 'Poor & Fair' experience on Trust on mobile attributes.

The table no. 4.36**(Please Refer Annexure –4, pp. 489)** has provided results of data analysis on experience on Perceived Usefulness of Price (PR) [MAQ AND MA] amongst the M-Shoppers' in the selected cities of Vadodara, Ahmedabad, Surat and Rajkot in the Gujarat State. In Vadodara city, M-Shoppers had revealed 'Fair' experience were more in number than the M-Shoppers who had reported 'Good' whereas reverse trend was found in Ahmedabad, Surat and Rajkot cities as majority of the M-Shoppers had reported good experience concerning price or cost of mobile attributes.

Table Number 4.37:Selected M-Shoppers' Responses on Mode of Payment Using Smartphones in M-Shopping

Mode of Payment used	Vadodara	Ahmedabad	Surat	Rajkot	Total
Cash	114(38.1)	239 (47.8)	198 (46.5)	130 (49.2)	681 (45.7)
Credit Card	144 (48.2)	243 (48.6)	213 (50.0)	131 (49.6)	731 (49.1)
Debit card	139 (46.5)	117 (23.4)	105 (24.6)	54 (20.5)	415 (27.9)
Mobile wallet	183 (61.2)	359 (71.8)	301 (70.7)	185 (70.1)	1028 (69.0)
Paytm	197 (65.9)	405 (81.0)	344 (80.8)	210 (79.5)	1156 (77.6)
Rupay	23 (7.7)	17(3.4)	15 (3.5)	7 (02.7)	62 (4.2)

Table number 4.37 has analysed overall mode of payment. It has revealed a similar trend. Paytm was found as the most adopted payment option in each of the four selected cities followed by mobile wallet as the second most wanted payment option. Debit and credit card too were also found as the preferred method of payment. Cash was found as least preferred mode of payment in each of the selected cities of the Gujarat State.

4.23: DISCUSSIONS AND INTERPRETATIONS OF THE RESEARCH STUDY:

The Chapter on Data Analysis and Interpretations had presented the profile of m-shoppers. The researcher had undertaken the surveys in the four selected cities viz., Baroda, Ahmedabad, Surat and Rajkot in the State of Gujarat. The analysis revealed that majority of m-shoppers out of 1480 selected m-shoppers of four selected cities were male, which implies that financial dependency might have played a role in this, which restricted the female m-shoppers to shop more from smartphone applications.

Overall m-shoppers were from age group of 16 to 40 and 41 to 60years, which implied that people from all of the age groups are engaged in m-shopping. People above 60 years, were not that conversant with the technology and they were also afraid of online payment so less number of m-shoppers were found in the research study. Marital status was not found very significant in m-shopping, because m-shopper will shop for himself/herself and for family members before and after marriage too. Type of family was also not found very significant in the research study.

Annual Income is definitely a factor affecting m-shopping, and respondents were belonging majorly to 8 to 12 lakhs and 8 to 12 lakhs per annum group. Educational qualification showed the result that very few m-shoppers were from undergraduate category, that means boys and girls who were studying those also bought products and availed services through smartphone applications. But majority of m-shoppers were graduate and post graduate.

Overall m-shoppers were having android operating system because of use friendliness and they were attracted by looks and feel of the smartphone and brand name, which is really very important for any smartphone user.

The M-Shoppers those were busy in shopping from home took more time while shopping considering the relaxed environment at home and were engaged for less than 60 minutes on smartphone for shopping. They mostly made the shopping decisions based on the opinions of the family members and their preferences. Products that had hedonic preferences or not of a basic necessity can be bought when surrounded with their friends or colleagues in the workplace, on the other hand the products that required the opinion of other family members or for the collective usage of a family as whole can be bought from home. The selected m-shoppers compared the similar products online by various shopping applications as well as the products that were identical to the selected products. They invested a lot of times in researching a product before making the buying decision. M-Shoppers were ready to uninstall a shopping application if it was an unfriendly and much complicated to understand the menu or any other navigation options. If the images were not clear, unable to zoom and had a closure look on the products, M-Shoppers would not get encouraged to use the applications.

The information received from data analysis was really very important to the m-tailors, smartphone manufacturers as well as to the smartphone application developers.

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