

CHAPTER-SIX

FINDINGS AND IMPLICATIONS OF THE RESEARCH STUDY

A GLANCE AT DETAILED CONTENT

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CHAPTER-SIX

FINDINGS AND IMPLICATIONS OF THE RESEARCH STUDY

6.0: INTRODUCTION:

The research study was undertaken to evaluate the factors that drive people to adopt mobile commerce. The key objective was to know the effect of factors namely, perceived cost, personalisation, privacy, Perceived Trust, Perceived Risk, perceived ease of use, perceived usefulness, social norms and perceived behavioural control on the attitude and adoption intention of mobile commerce. The effect of demographic variable on adoption intention was also covered in the present research study. The research study was conducted based on primary as well as secondary data and primary data was collected from 1480 users of mobile commerce from different sections of the society who was settled in selected cities of Gujarat, viz., Ahmedabad, Surat, Vadodara and Rajkot city respectively. Data was collected from mobile commerce users using a pre-tested structured non-disguised questionnaire (to ascertain reliability and validity of the variable under study) and the collected data was edited, coded, summarised and tabulated by using descriptive statistics, Correlation, Chi-Square and Structural Equation Modelling(SEM). Major findings and implications are also mentioned in this chapter as the final output of the research study.

6.1: FINDINGS OF CORRELATION:

Kendall's Tau Correlation was used to determine the relationships among the selected variables because the main data collected from the four cities was not normally distributed. The t-test was used to determine the significance of the relationship among variable. When a correlation is positive, the relationship between the variable is said to be positive, and when the correlation is negative, the relationship is said to be negative. When $r^2 > .50$, correlation is said to be high, and when $r^2 < .50$, correlation is said to be low.

6.1.1: Findings of Correlation Between Drivers Viz Perceived Cost, Personalisation, Privacy, Perceived Trust, Perceived Risk, Perceived Ease of Use, Perceived Usefulness, Social Norms and Perceived Behavioural Control with Attitude Towards Adopting m-Commerce

Table Number 6.1 shows the results of the hypothesis "The selected drivers of m-Commerce viz., perceived cost, personalisation, privacy, Perceived Trust (Arpaci, 2016¹; Zhang et al,2012²; Zhou,2011³), Perceived Risk (Liébana-Cabanillas et al., 2017⁴), perceived usefulness, perceived ease of use (Mclean et al., 2020)⁵, social norms and perceived behavioural control has significant impact on consumers' attitude towards m-Commerce applications".

Table Number: 6.1: Findings of Correlation Between Drivers of m-Commerce Viz Perceived Cost, Personalisation, Privacy, Perceived Trust, Perceived Risk, Perceived Ease of Use, Perceived Usefulness, Social Norms and Perceived Behavioural Control with Attitude Towards m-Commerce Applications

Sr. No.	Selected Variables	Attitude Towards m-Commerce				
1	Perceived Cost	0.082**				
2	Personalisation	0.035*				
3	Privacy	0.038*				
4	Perceived Trust	0.044*				
5	Perceived Risk	0.126**				
6	Perceived Ease of Use	0.182**				
7	Perceived Usefulness	0.159**				
8	Social Norms	0.048**				
9	Perceived Behavioural Control	0.014				
	Correlation is significant at the 0.01 level (1-tailed). Correlation is significant at the 0.05 level (1-tailed).					

The perceived cost, personalisation, privacy, perceived trust, perceived risk, perceived ease of use, perceived usefulness, social norms, and perceived behavioural control of m-Commerce, all showed a low degree of positive correlation. The correlation between the variables was found to be significant at the 0.01 level, indicating that there is less than 1 percent chance of not having the same relation between the perceived cost, Perceived Risk, perceived ease of use, perceived usefulness and social norms with the attitude of m-Commerce users in the future. Personalisation, privacy and Perceived Trust were found to be related at 0.05 level of significance, which represent that there is less than 5 percent chance of not having the same relationship among the above mention three variables and the attitude of m-Commerce users in the future. But, the relationship between perceived behavioural control and the attitude of m-Commerce users were not found to be significant at 0.05 level. Hence the hypothesis, "The selected drivers of m-Commerce viz., perceived cost, personalisation, privacy, Perceived Trust, Perceived Risk, perceived usefulness, perceived ease of use, social norms and perceived behavioural control has significant impact on consumers' attitude towards m-Commerce applications" is accepted for perceived cost, personalisation, privacy, Perceived Trust, Perceived Risk, perceived usefulness, perceived ease of use, and social norms but rejected for perceived behavioural control at 0.01 and 0.05 level of significance.

6.1.2: Findings of Correlation Between Drivers Viz., Perceived Cost, Personalisation, Privacy, Perceived Trust, Perceived Risk, Perceived Ease of Use, Perceived Usefulness, Social Norms, Perceived Behavioural Control and Attitude with Adoption Intention Towards m-Commerce Table 6.2 showed the results of hypothesis "The selected drivers of m-Commerce viz., perceived cost, personalisation, privacy, Perceived Trust (Arpaci, 2016¹; Zhang et al,2012⁶; Zhou,2011³), Perceived Risk (Liébana-Cabanillas et al., 2017)⁴, perceived usefulness, perceived ease of use (Mclean et al., 2020)⁵, social norms and perceived behavioural control has significant impact on adoption intention of users of m-Commerce applications."

Table Number: 6.2: Findings of Correlation Between Drivers Viz., Perceived Cost, Personalisation, Privacy, Perceived Trust, Perceived Risk, Perceived Ease of Use, Perceived Usefulness, Social Norms, Perceived Behavioural Control and Attitude with Adoption Intention **Towards m-Commerce**

Sr. No.	Selected Variables	Adoption Intention towards m-Commerce					
1	Perceived Cost	0.102**					
2	Personalisation	0.007					
3	Privacy	0.015					
4	Perceived Trust	0.043*					
5	Perceived Risk	0.050**					
6	Perceived Ease of Use	0.089**					
7	Perceived Usefulness	0.086**					
8	Social Norms	0.048**					
9	Perceived Behavioural Control	0.002					
10	Attitude	0.390**					
Note: **.	Correlation is significant at the 0.01 level (1-tailed).					
*. Correlat	ion is significant at the 0.05 level (1-tailed).					

Low degree of positive correlation was found between all the drivers of m-Commerce with the adoption intention. The relation was found to be significant at 0.01 level for perceived cost, Perceived Risk, perceived usefulness, perceived ease of use, social norms and attitude and at 0.05 level of significance for Perceived Trust. For the rest of drivers namely, personalisation, privacy, and perceived behavioural control, the relationship was there with the adoption intention but was not significant at 0.01 or 0.05 level of significance. Hence the hypothesis, "The selected drivers of m-Commerce viz., perceived cost, personalisation, privacy, Perceived Trust, Perceived Risk, perceived usefulness, perceived ease of use, social norms and perceived behavioural control has significant impact on adoption of m-Commerce applications" is accepted for perceived cost, Perceived Risk, perceived usefulness, perceived ease of use, social norms, Perceived Trust and attitude; but rejected for personalisation, privacy, and perceived behavioural control at 0.01 and 0.05 level of significance.

6.1.3: Implications of the Correlation Test

Perceived cost, Perceived Trust, perceived usefulness, perceived ease of use and social norms had the significant effect on the attitude and adoption intention for m-Commerce adoption. Cost of m-Commerce applications was found to play a crucial role in developing favourable attitude towards the concerned applications. Thus, business operating their business through m-Commerce application should consider the cost aspect and try to minimise the cost for operating the m-commerce application for purchase of different product and services. Negative impact of cost can be mitigated through lucrative offers in the form of cash coupon and discounts offered for purchasing the product and services through m-commerce application. m-commerce business should also try to improve the Perceived Trust for the application by adopting transparent system. The business and developers thus should ensure to avoid the data breach by the company and should ensure the customer for not sharing their data with the other individuals or business Organisation.

The identity theft, 'phishing scam', adware and malware, credit card fraud, fake online store or applications, all leads to lot of risks involved with m-Commerce transaction which can be minimized through proper safety and security measures like data encryption, which helps in developing positive attitude towards adopting m-Commerce.

Perceived usefulness and perceived ease of use are other main drivers that affect both attitude and adoption of m-commerce application. One of the reasons that prompt users to adopt m-Commerce is the ability choose wide variety of products with a few clicks at our own pace without the interference of anyone. In order to improve the usefulness of offers to the target consumers, companies gather search history of people and try to customize the offers. Even though this move may be useful in serving the consumers efficiently, companies should make sure that collecting such information may cause bad reputation for the company when people relate it as an invasion to their privacy.

Social norms also play a significant role in m-Commerce transaction as people normally have a tendency to take review from friends, relatives, and from online merchant sites, all these parties play a major role in m-Commerce purchase decision. M-Commerce companies can use reference group to attract more consumers towardstheir products and services and thus increase their business through m-commerce applications.

6.2 FINDINGS OF APPLICATION OF CHI-SQUARE TEST

Chi square test was used to find the association and test the hypotheses "There is no significant difference between selected demographic variables of m-Commerce users viz., age, gender, marital status, type of family, occupation and annual income vis-a-vis their perception regarding Perceived Cost, personalisation, privacy, Perceived Trust, Perceived Risk, perceived ease of use, perceived usefulness, social norms, perceived behavioural control, attitude and adoption intention for the use of m-Commerce applications." The findings of Chi-square test are presented as follows:

6.2.1 Association of Perceived Cost, Personalisation, Privacy, Perceived Trust, Perceived Risk, Perceived Ease of Use, Perceived Usefulness, Social Norms, Perceived Behavioural Control, Attitude and Adoption Intention with Selected Demographic Variables Viz., Age; Gender; Marital Status; Type of Family; Occupation and Annual Income

6.2.1.1 : Association of Selected Demographic Variables Viz., Age; Gender; Marital Status; Type of Family; Occupation and Annual Income with the Perceived Cost:

The result of the test for association between the demographic variables and the perceived cost is given in table number 6.3.

Table No. 6.3: Selected m-Commerce Users' Opinion on Perceived Cost of Smartphone and m-Commerce Transaction Vis-à-Vis Selected Demographic Variable Viz., Age; Gender; Marital Status; Type of Family; Occupation and Annual Income:

Selected criteria	Results of χ2 test							
	Age	Gender	Marital status	Type of family	Occupation	Annual Income		
Smartphone is not expensive	.429	.092	.845	.031*	.410	.617		
Transaction fee is not high	.734	.751	.651	.721	.851	.240		
m-Commerce transactions save money	.008**	.197	.588	.649	.003**	.640		
Internet services not expensive	.491	.899	.936	.164	.399	.182		
Do not incur additional expenditure to switch from wired to m-payment option	.000**	.964	.014*	.919	.007**	.687		
Wireless Network connection not expensive	.015*	.132	.174	.664	.144	.089		
Manage resources to use m-commerce	.001**	.366	.003**	.191	.007**	.053		
Not afraid of fraudulent charges	.004**	.726	.771	.943	.281	.001**		
m-Commerce are not burden for me	.363	.115	.676	.676	.461	.001**		
	Smartphone is not expensive Transaction fee is not high m-Commerce transactions save money Internet services not expensive Do not incur additional expenditure to switch from wired to m-payment option Wireless Network connection not expensive Manage resources to use m- commerce Not afraid of fraudulent charges	Smartphone is not expensive .429 Transaction fee is not high .734 m-Commerce transactions save money Internet services not expensive Do not incur additional expenditure to switch from wired to m-payment option Wireless Network connection not expensive Manage resources to use m-commerce Not afraid of fraudulent charges m. Commerce are not burden	Smartphone is not expensive .429 .092 Transaction fee is not high .734 .751 m-Commerce transactions save money Internet services not expensive .491 .899 Do not incur additional expenditure to switch from wired to m-payment option Wireless Network connection not expensive .015* .132 Manage resources to use m-commerce .001** .366 Not afraid of fraudulent charges .004** .726	Smartphone is not expensive .429 .092 .845 Transaction fee is not high .734 .751 .651 m-Commerce transactions save money Internet services not expensive .491 .899 .936 Do not incur additional expenditure to switch from wired to m-payment option Wireless Network connection not expensive .005* Manage resources to use m-commerce .001** .366 .003** Not afraid of fraudulent charges .004** .726 .771	Age Gender Marital status Type of family	Age Gender Marital status Type of family Occupation		

As given in Table Number 6.3, Age was found to be associated with the perceived cost in 5 out of 9 statements at 0.01 and 0.05 level (1 statement) of significance, followed by the occupation which was associated with the perceived cost in 3 out of 9 statements at 0.01 level of significance. The annual income and marital status of m-commerce users had an association in 2 out of 9 statements at 0.01 and 0.05 level (1 statement) of significance, whereas Type of family of m-commerce users was associated with only one statement at 0.05 level of significance. Hence out of total 54 cases, the association was found significant in 13 cases and the hypothesis is rejected for these cases and the study fail to reject the hypothesis for other 41 cases as no significant association were found between the demographic variables and the statements identifying the variable 'Perceived Cost' under the study.

6.2.1.2: Association of Selected Demographic Variables Viz., Age; Gender; Marital Status; Type of Family; Occupation and Annual Income with the Personalisation:

The result of the test for association between the demographic variables and the personalisation is given in table number 6.4.

^{*.} Association is significant at 0.01 level(2-tailed)

Table No. 6.4: Selected M-Commerce Users' Opinion on Personalization of m-Commerce Transaction Vis-à-Vis Selected Demographic Variables of m-Commerce users Viz., Age; Gender; Marital Status; Type of Family; Occupation and Annual Income.

Selected criteria	Results of χ2 test							
	Age	Gender	Marital status	Type of family	Occupation	Annual Income		
Like to receive offers for preferred products	.521	.503	.036*	.144	.617	.072		
Choice to register for selected mobile advertisements	.424	.692	.569	.921	.015*	.515		
Important to receive info on products of my choice	.943	.767	.376	.351	.533	.683		
m-commerce Vendors should keep updated customer information for personalised offers	.105	.487	.397	.717	.234	.774		
Willing to share preferred product information with m-commerce vendors	.000**	.586	.041*	.828	.022*	.380		
	Choice to register for selected mobile advertisements Important to receive info on products of my choice m-commerce Vendors should keep updated customer information for personalised offers Willing to share preferred product information with m-commerce vendors	Like to receive offers for preferred products Choice to register for selected mobile advertisements Important to receive info on products of my choice m-commerce Vendors should keep updated customer information for personalised offers Willing to share preferred product information with m-commerce vendors .521 .424 .425 .426 .943 .105	Like to receive offers for preferred products Choice to register for selected mobile advertisements Important to receive info on products of my choice m-commerce Vendors should keep updated customer information for personalised offers Willing to share preferred product information with m- 1.521 .503 .424 .692 .425 .767 .487	Like to receive offers for preferred products Choice to register for selected mobile advertisements Important to receive info on products of my choice m-commerce Vendors should keep updated customer information for personalised offers Willing to share preferred product information with m-commerce vendors Status .521 .503 .036* .569 .569 .767 .376 .376 .397 .487 .397 .487 .397	Like to receive offers for preferred products Choice to register for selected mobile advertisements Important to receive info on products of my choice m-commerce Vendors should keep updated customer information for personalised offers Willing to share preferred product information with m-commerce vendors **Status** **Impulse** **Seasonate** **Seasonate**	Like to receive offers for preferred products Choice to register for selected mobile advertisements Important to receive info on products of my choice m-commerce Vendors should keep updated customer information for personalised offers Willing to share preferred products Second Status Family Status Samily Samily		

^{*.} Association is significant at 0.01 level(2-tailed)

As shown in Table 6.4, Occupation and Marital status were found to be associated with personalisation in 2 out of 5 statements at 0.05 percent level of significance, followed by Age which was associated with Personalisation in 1 out of 5 statements at 0.01 level of significance. Hence out of total 30 cases, the association was found significant in 05 cases and the hypothesis is rejected for these cases and study fail to reject the hypothesis as no significant association was found between the selected demographic variables and the statements identifying the variable personalization' under the study for the other 25 cases.

6.2.1.3 : Association of Selected Demographic Variables Viz., Age; Gender; Marital Status; Type of Family; Occupation and Annual Income with the Privacy:

The result of the test for association between the demographic variables and the privacy is given in table number 6.5

Table No. 6.5: Selected m-Commerce Users' Opinion on Privacy of m-Commerce Transaction Vis-à-Vis Selected Demographic Variable Viz., Age; Gender; Marital Status; Type of Family; Occupation and Annual Income.

Sr.	Selected criteria	Results of χ2 test						
No.		Age	Gender	Marital status	Type of family	Occupation	Annual Income	
1	MC is an invasion of my privacy	.001**	.330	.459	.651	.119	.461	
2	Location information invades privacy	.000**	.434	.127	.946	.017*	.716	
3	Personal information should be kept confidential by MC vendors	.000**	.475	.001**	.057	.000**	.041*	

Note: **. Association is significant at 0.01 level(2-tailed)

^{*.} Association is significant at 0.01 level(2-tailed)

As exhibited in Table number 6.5, Age was found to be associated with Privacy in all the 3 statements at 0.01 level of significance, followed by Occupation where 2 out of 3 statements were associated with privacy at 0.01 and 0.05 level of significance (1 statement each). In case of annual income and marital status, one out of three statements were found to be significant at 0.05 and 0.01 level respectively. It can be found that out of 18 statements, association was found to be significant in case of 7 statements where hypothesis was rejected and for the remaining 11 statements study fail to reject the hypothesis as no significant association was found between the selected demographic variables and the statements identifying the variable 'Privacy' under the study.

6.2.1.4 : Association of Selected Demographic Variables Viz., Age; Gender; Marital Status; Type of Family; Occupation and Annual Income with Perceived Trust:

The result of the test for association between the demographic variables and Perceived Trust is given in table number 6.6.

Table No. 6.6: Selected m-Commerce Users' Opinion on Perceived Trust involved with m-Commerce Transaction Vis-à-Vis Selected Demographic Variable Age; Gender; Marital Status; Type of Family; Occupation and Annual Income.

Sr.	Selected criteria	Results of χ2 test							
No.		Age	Gender	Marital status	Type of family	Occupation	Annual Income		
1	Confident during online purchases	.000**	.133	.005**	.490	.004**	.958		
2	MC vendors are committed	.000**	.420	.004**	.328	.022*	.988		
3	MC vendors are efficient in serving customers	.296	.037*	.328	.953	.188	.975		
4	MC vendors perform as per customers' expectations	.197	.913	.573	.445	.383	.884		
5	Technology advances make MC transactions trustworthy	.311	.394	.744	.058	.621	.600		
6	Online stores that display assurance seals are trust worthier	.451	.049*	.890	.577	.630	.825		
7	Feel confident in giving details of debit and credit card	.782	.598	.704	.127	.368	.475		
8	Payments process in MC is smooth and secure	331	.144	.350	.100	.796	.700		
9	Choice to opt-in or opt-out to share personal details with third parties.	.392	.764	.678	.673	.684	.853		

*. Association is significant at 0.01 level(2-tailed)

Table number 6.6 exhibits that Age and Marital status were associated with Perceived Trust in 2 out of 9 statements at 0.01 level of significance. Occupation was also found to be associated with perceived trust in 2 statements, but association was significant at 0.01 level and the other at 0.05 level of significance. Gender was found to be significant in two out of nine statements at 0.05 level of significance.

Hence, out of 54 statements, association was found to be significant for 08 statements where the hypothesis is rejected and in case of the remaining 46 statements, study fail to reject the hypothesis as no significant association was found between the selected demographic variables and the statements identifying the variable 'Perceived Trust' under study.

6.2.1.5 : Association of Selected Demographic Variables Viz., Age; Gender; Marital Status; Type of Family; Occupation and Annual Income with the Perceived Risk:

The result of the test for association between the demographic variables and the Perceived Risk is given in table number 6.7.

Table No. 6.7: Selected M-Commerce Users' Opinion on Perceived Risk of m-Commerce Transaction Vis-à-Vis Selected Demographic Variables of m-Commerce users Viz., Age; Gender; Marital Status; Type of Family; Occupation and Annual Income.

Sr.	Selected criteria	Results of χ2 test							
No.		Age	Gender	Marital status	Type of family	Occupation	Annual Income		
1	Others cannot tamper with information of my M-Commerce transactions	.859	906	.351	.155	.741	.851		
2	M-Commerce transactions do not have potential risk	.234	.634	.767	.241	.885	.613		
3	M-Tailors' information is trustworthy	.235	.721	.634	.667	.833	.813		
4	Feeding payment details in smartphones do not have potential risk	.788	.984	.631	.530	.781	.495		
5	M-Commerce provide adequate information on the website and have enough operational reliability.	.129	.071	1.000	.105	.395	.035*		
6	There is no risk of an unauthorized third party overseeing the payment process	.110	.462	.819	.288	.157	.015*		
7	Regulations on M-Commerce minimise the privacy risks	.678	.437	.951	.195	.020*	[.285		

As given in Table number 6.7, Annual Income was found to be associated with Perceived Risk in 2 out of 7 statements, one at 0.01 level and the other at 0.05 level of significance. In case of Occupation one out of seven statements were found to be significant at 0.01 level of significance. It can be found that, out of 42 statements, association was found to be significant for 3 statements and the hypothesis was rejected and for the remaining 39 statements, study fail to reject the hypothesis as no significant association was found between the selected demographic variables and the statements identifying the variable 'Perceived Risk' under study.

6.2.1.6: Association of Selected Demographic Variables Viz., Age; Gender; Marital Status; Type of Family; Occupation and Annual Income with the Perceived Ease of Use:

The result of the test for association between the demographic variables and the Perceived Ease of Use is given in table number 6.8.

Table No. 6.8: Selected m-Commerce Users' Opinion on Perceived Ease of Use of Smartphone in M-Commerce Transaction Vis-à-Vis Selected Demographic Variables of m-Commerce users Viz., Age; Gender; Marital Status; Type of Family; Occupation and Annual Income.

Sr.	Selected criteria			Resu	lts of χ2 test		
No.		Age	Gender	Marital status	Type of family	Occupation	Annual Income
1	Easy to use smartphone for m-commerce	.178	.076	.124	.385	.233	.191
2	Interaction is clear & easy to understand	.826	.494	.993	.111	.099	.099
3	Using cell phone is comfortable with online transactions	.001**	.136	.076	.211	.633	.076
4	Convenient to get information on promotional offers	.000**	.164	.221	.162	.036*	.311
5	Easy to become skillful atusing cell phone for MC transactions	.000**	.218	.145	.153	.010**	.120
Note	: **. Association is significant	at 0.01 lev	vel(2-tailed)				•

As given in Table number 6.8, Age was found to be associated with Perceived Ease of Use in three out of five statements at 0.01 level of significance followed by Occupation which was found to be significant for two statements, one at 0.01 and the other at 0.05 level of significance. Hence, out of 30 statements, five statements found to be significantly associated and the hypothesis was rejected and the other 25 statements, study fail to reject the hypothesis as no significant association was found between the selected demographic variables and the statements identifying the variable 'Perceived Ease of Use' under study.

6.2.1.7: Association of Selected Demographic Variables Viz., Age; Gender; Marital Status; Type of Family; Occupation and Annual Income with the Perceived Usefulness:

The result of the test for association between the demographic variables and the Perceived Usefulness is given in table number 6.9.

^{*.} Association is significant at 0.01 level(2-tailed)

Table No. 6.9: Selected m-Commerce Users' Opinion on "Perceived Usefulness" of m-Commerce Transaction Vis-à-Vis Selected Demographic Variable viz., Age; Gender; Marital Status; Type of Family; Occupation and Annual Income.

Sr.	Selected criteria			Resu	lts of χ2 test	t	
No.		Age	Gender	Marital status	Type of family	Occupation	Annual Income
1	Easy to search & compare products/services	.068	.048*	.674	.018*	.035*	.213
2	Helps me in accomplishing tasks faster.	.000**	.641	017*	.642	.000**	.765
3	MC make life better	.000**	.659	.003**	.257	.000**	.498
4	Use of MC reflects my personality	.000**	.304	.525	.764	.132	.465
5	Know more about new products than others	.014*	.593	.012*	.414	.080	.622
6	Flexible to conduct transactions anytime anywhere	.075	.520	.235	.900	.122	.843
7	MC users are better informed about the product/service they intend to buy	.001**	.395	.474	.724	769	.108

Table number 6.9 demonstrate association of Age with Perceived Usefulness in five out of seven statements at 0.01 level of significance, followed by 3 statements of Marital status and Occupation at 0.01 and 0.05 (one statement of Occupation) level of significance. One out of seven statements of Type of family and Gender were found to be significant at 0.01 and 0.05 level of significance respectively. Out of the 42 statements, 13 statements were significantly associated where they hypothesis was rejected and in case of 29 statements, study fail to reject the hypothesis as no significant association was found between the selected demographic variables and the statements identifying the variable 'Perceived Usefulness' under study.

6.2.1.8: Association of Selected Demographic Variables Viz., Age; Gender; Marital Status; Type of Family; Occupation and Annual Income with Social Norms:

The result of the test for association between the demographic variables and the Perceived Usefulness is given in table number 6.10.

^{*.} Association is significant at 0.01 level(2-tailed)

Table No. 6.10: Selected m-Commerce Users' Opinion on Social Norms involved with m-Commerce Transaction Vis-à-Vis Selected Demographic Variable viz., Age; Gender; Marital Status; Type of Family; Occupation and Annual Income.

Sr.	Selected criteria	Results of χ2 test							
No.		Age	Gender	Marital status	Type of family	Occupation	Annual Income		
1	People close to me believe that I should engage in MC services.	.000**	.730	.423	.314	.769	.945		
2	Majority of my friends/ colleagues use MC services	.002**	.096	.376	.341	.020*	.947		
3	People close to me believe that adopting MC services is a good/wise decision.	.103	.685	.946	.593	.851	.480		
4	People close to me believe that using mobile commerce services is beneficial.	.072	.101	.654	.355	.162	.649		
5	I trust my intuition more than advice from others while using new technology.	.000**	.046*	.730	.215	.066	.190		
6	I seek the advice of others who have used new products prior to purchasing them.	.179	.525	.057	.094	.163	.390		
7	Friends and relatives influence my decision to use M-commerce	.736	.626	.623	.171	.928	.550		
8	Mass media recommendation influenced me to use M-commerce	.925	.370	.764	.277	.900	.282		

Note: **. Association is significant at 0.01 level(2-tailed)

As specified in Table number 6.10, Age was found to be associated with Social Norms in three out of eight statements at 0.01 level of significance, followed by Gender and Occupation, where one out of eight statements were found to be significant at 0.05 level of significance. Out of the 48 statements, only five statements found to be significantly associated where the hypothesis was rejected, and the study fail to reject the hypothesis as no significant association was found between the selected demographic variables and the statements identifying the variable 'Social Norms' in 44 statements under the study.

6.2.1.9 : Association of Selected Demographic Variables Viz., Age; Gender; Marital Status; Type of Family; Occupation and Annual Income with Perceived Behavioural Control:

The result of the test for association between the demographic variables and the Perceived Behavioural Control is given in table number 6.11.

^{*.} Association is significant at 0.01 level(2-tailed)

Table No. 6.11: Selected m-Commerce Users' Opinion on "Perceived Behavioural Control" involved with m-Commerce Transaction Vis-à-Vis Selected Demographic Variable Viz., Age; Gender, Income, Occupation, Type of Family and Marital Status:

Sr.	Selected criteria	Results of χ2 test							
No.		Age	Gender	Marital status	Type of family	Occupation	Annual Income		
1	Able to use MC services without others help	.000**	.934	.225	.648	.023*	.892		
2	Have necessary means and resources to use MC services	.065	.426	.361	.179	.896	.229		
3	Have knowledge and ability to use mc services	.000**	.861	.399	.619	.066	.843		
4	Waiting to receive MC services	.031*	.849	.811	.346	.079	.864		
5	Will recommend MC service to others	.003**	.909	.794	.526	.376	.918		
6	MC transactions is entirely within my control	.000**	.937	.233	.588	.007**	.014*		
7	Have access to the software, hardware and network services required to use MC services.	.000**	.673	.002**	.705	.000**	.550		
8	Intention to purchase via mobile phone is very high	.000**	.407	.000**	.104	.000**	.075		

The Table number 6.11 displays the association of demographic variable with the 'Perceived Behavioural Control'. From the table it was examined that in seven out of eight statements, age was associated with the statement of Perceived Behavioural Control at 0.01 and 0.05 (one statement) level of significance. Occupation of m-Commerce users was associated with four out of eight statements at 0.01 and 0.05 (one statement) level of significance.

Two out of eight statements were found to be significant at 0.01 level of significance in case of marital status and one out of eight statements were found to be significant in annual income. Out of 48 statements, 14 statements were found to be significantly associated with the demographic factors under study where the hypothesis was rejected. The study fails to reject the hypothesis as no significant association was found between the selected demographic variables and the statements identifying the variable 'Perceived Behavioural Control' in case of 34 statements under study.

6.2.1.10: Association of Selected Demographic Variables Viz., Age; Gender; Marital Status; Type of Family; Occupation and Annual Income with Attitude:

The result of the test for association between the demographic variables and the Attitude is given in table number 6.12.

^{*.} Association is significant at 0.01 level(2-tailed)

Table No. 6.12: Selected m-Commerce Users' Opinion on Attitude towards m-Commerce Transaction Vis-à-Vis Selected Demographic Variable Viz., Age; Gender; Marital Status; type of family; occupation and annual income:

Sr.	Selected Criteria			Resu	lts of χ2 tes	st	
No.		Age	Gender	Marital status	Type of family	Occupation	Annual Income
1	Using M-commerce services is a good /wise idea	.798	.270	.362	.245	.255	.770
2	Favour M-commerce usage	.367	.522	.822	.510	.067	.051
3	MC services are beneficial for me	.440	.573	.347	.747	.122	.239
4	Hold positive perception of t using MC services	.623	.515	.414	.167	.567	.289
5	Feel satisfied during MC transactions	.012*	.639	.760	.869	.023*	.177
6	Essential to use M-commerce	.055	.764	.789	.591	.176	.153
7	Hold positive views towards offering discounts through mobile coupons	.093	.548	.975	.101	.471	.018*
8	Undertake online scanning of products prior making a purchase	.003**	.688	.549	.486	.022*	.116
9	Enjoy buying products & services via M-commerce	.000**	.444	.877	.877	.009**	.367
Note	: **. Association is significant at	0.01 level	(2-tailed)		<u> </u>		1

From Table number 6.12, it was found that in four out of nine statements, age was associated with Attitude at 0.01 percent (two statements) and 0.05 (1 statement) level of significance and occupation was also associated with attitude where three out of nine statements were found to be significant at 0.01(one statement) and 0.05 (two statements) level of significance. Association was also found significant in case of annual income where one out of nine statements were found to be associated at 0.05 level of significance.

Thus, out of 54 statements, 7 statements were found to be significantly associated and thus the hypothesis was rejected in these cases. The study fails to reject the hypothesis as no significant association was found between the selected demographic variables and the statements identifying the variable 'Attitude' in case of 47 statements under the study.

6.2.1.11: Association of Selected Demographic Variables Viz., Age; Gender; Marital Status; Type of Family; Occupation and Annual Income with Adoption Intention:

The result of the test for association between the demographic variables and the Adoption Intention is given in table number 6.13.

^{*.} Association is significant at 0.01 level(2-tailed)

Table No. 6.13: Selected Users' Opinion on Adoption Intention of M-Commerce Transaction Visà-Vis Selected Demographic Variable Viz., Age; Gender; Marital Status; type of family; occupation and annual income.

				Resul	ts of χ2 tes	st	
Sr. No.	Selected Criteria	Age	Gender	Marital status	Type of family	Occupation	Annual Income
1	Cost of MC transactions are not more than other channels	.036*	.098	.895	.202	.052	.838
	Prefer to use M-commerce which is personalised for me	.070	.329	.976	.184	.055	.566
3	Would adopt M-commerce, If Privacy is taken care of	.027*	.049*	.215	.230	.024*	.792
4	Want to adopt M-commerce as I trust it	.098	.730	.892	.197	.002**	.017*
5	Recent laws reduce the risk can affect MC adoption	.066	.495	.260	.582	.008**	.003**
6	User-friendliness of MC make its adoption easy	.390	.500	.269	.782	.172	.466
7	Hassle free shopping through smartphone influences MC adoption	.053	.115	.288	.391	.019*	.019*
8	Positive attitude of Society towards MC influences its adoption	.611	.630	.777	.945	.076	.733
9	Will continue to make use of M-commerce transactions in the near future	.088	.843	.067	.197	.190	.662
10	Intend to make more MC transactions in future	.322	.585	.964	.043*	.076	.893
11	Will strongly recommend others to use MC services	.025*	.707	.109	.082	.002**	.327

From the table number 6.13, it was found that, five out of eleven statements of Adoption Intention were found to be associated with the occupation of m-Commerce users at 0.01 and 0.05 level (one statement) of significance, followed by age where three out of eleven statements were found to be significant at 0.05 level of significance. Three out of eleven statements were found to be significant at 0.01 level and at 0.05 percent (two statements) level of significances in case of annual income. One out of eleven statements were found significant at 0.05 level of significance in case of gender and type of family of M-Commerce users at 0.05 percent level of significance. Hence, out of 66 statements, 13 statements were found to be significantly associated where hypothesis was rejected.

The study fails to reject the hypothesis in case of 53 statements, as no significant association was found between the selected demographic variables and the statements identifying the variable 'Attitude' under the study.

6.2.2: Implications of the Research Study Based on the Results of the Chi-Square Test based on different drivers of m-Commerce viz., Perceived Cost, Personalisation, Privacy, Perceived Risk, Perceived Trust, Perceived usefulness, Perceived ease of use, social norms, Perceived Behavioural Control, Attitude and Adoption intention Vis-à-Vis Selected Demographic Variables Such as Age; Gender, Income, Occupation, Type of Family and Marital Status

Cost plays a crucial role in purchasing decision of people in developing country like India as people are highly price sensitive. The research study had made an attempt to find the association between cost of smartphone as well as mobile commerce services on Age, gender, income, occupation, marital status and type of family.

Age was found to be an important factor in adoption decision as different age groups have different perception regarding the cost involved with m-Commerce transaction. Smart phone manufacturer should keep the price factor in mind while developing smartphone as well as service providers should provide internet data at affordable price. M-commerce service providers should consider the age-related factors while designing the mobile applications for m-Commerce users. As the users have opined that Network connection fees are not expensive, m-Commerce transaction helps them to save money and have enough resources to engage in m-Commerce, this provide ample opportunities for m-commerce companies to explore this medium to the maximum extent as users of different age groups are not much worried about the cost involved with m-Commerce.

Marital status influence adoption decision as married people have adopted more than their counterpart and they have different views regarding their ability to manage resources to involve with m-Commerce as well as are not worried about the additional charges involved while switching from wired to wireless option.

M-commerce users from different occupational background differ in the opinion for the saving of the money with the use of different m-Commerce applications. M-commerce companies thus, should investigate these views further to know the occupational difference involved with m-Commerce adoption. Even though users are not afraid of fraudulent charges, m-Commerce merchants should make sure that there is transparency in the system by disclosing all kind of charges involved with m-Commerce transaction in order to improve its credibility among users.

Even though consumers have necessary means and resources to involve in m-commerce transaction, people having different income level expressed different views that m-commerce transactions are not burden for them, this aspect need to be investigated further to know the factors that have led them to feel so and should take proper measures to reduce their burden which may boost m-Commerce adoption and usage. As cost plays a crucial role in purchasing decision of people in developing country like India as people are highly pricesensitive. m-tailers can think of giving some attractive discounts to these price sensitive consumers so that they may adopt and continue to use their products and services thereby results into customer satisfaction.

Regarding the personalisation of m-Commerce transaction, users of different age group have different opinion regarding the willingness to share information about preferred products with m-Commerce vendors. m-Commerce users, irrespective of their age have shown their willingness to accept promotional message, special price and coupons of their favourite products. Users are also showing readiness to share their choice of product with expected features, m-Commerce merchants should explore this opportunity to design products and services as per users' specification. The m-Commerce vendors should consider the age factor while sending mobile advertisements to the targeted customer groups as they have reacted differently to these kinds of messages. m-Commerce companies should avoid bombarding advertisement to consumers, rather go for selective advertisement based on consumers search history. In case of marital status, people differ in their views regarding receiving promotional messages and coupons of their preferred choice, they are willing to share the information regarding the same. Marketers before targeting these customer groups should ask for permission before sending messages as permission-based marketing can take m-Commerce to the next level. People from nuclear and joint family differs in their opinion to have a choice to register for mobile advertisement of their preferred product categories, which has to be considered by marketers while opting for permission-based marketing. People from different occupational background want to have the choice to register for mobile advertisement and have shown willingness to share preferred product information with m-Commerce vendors, the latter should collect information about consumers' product choice and attributes by building trust on m-Commerce service providers and by dealing with security issues involved in m- Commerce.

Age was an important factor in studying privacy related aspects of m-Commerce adoption as people belong to different age group have different views regarding privacy issues involved in m-Commerce, so mobile manufactures should design the device in such a way that it will cater to the privacy needs of all age groups positively. Irrespective of gender, income and type of family, users consider sharing location-based information is an invasion to their privacy and opined that personal information should be kept as confidential by m-Commerce vendors. The mobile merchants should consider this aspect seriously as users treat their mobile phones as personal. Marital status exerts considerable influence on privacy as the users exhibit different views regarding the need to keep personal information as confidential.

Different age groups have developed different level of trust and commitment with regard to m-Commerce transactions. The m-Commerce service providers should consider age factor in mind while developing products to consumers as people may get more conscious about safety and security aspects of m-Commerce that affect their level of confidence and commitment which may increase with age. Both male and female have expressed difference in the opinion regarding the efficiency of m-Commerce vendors in serving the customers as well as their views about online stores that display assurance seals are trust worthier. m-Commerce merchants should take proper care to attract and maintain the new as well as existing consumers through efficient service during and after the sale.

Marital status and occupational background have changed their views regarding confidence level during online purchase and the opinion that m-Commerce vendors are committed towards serving the consumer's as married people are showing high level of confidence and commitment towards m-Commerce transaction. As there is difference in the opinion of consumers on the basis of their occupational background and marital status, this aspect also requires due attention from m-Commerce service providers while designing and delivering m-Commerce services.

Irrespective of their age, gender, marital status, type of family, occupation and income, users have similar opinion regarding the risk aspects involved with disclosing personal and payment details as well as the risk of third-party tampering information about m-commerce transaction. Even though users from different demographic profile have not expressed much concern regarding the risk involved with m-Commerce transaction, then also the application developers should continue to ensure the safety and security involved with online transaction.

The main reason for going for m-Commerce is the perceived ease of use involved with mobile transactions as everything is available in a click of mouse from anywhere at any time we prefer and can avoid queues while shopping and billing in shopping malls. Moreover, consumers will be able to choose from vast variety of products offered by e-commerce vendors. In offline shopping, salesmen may force you to buy products and you may end up with accumulating unwanted stuff which can be easily avoided through if purchased online, moreover extra money is required for transportation, family dining etc. which can be avoided if purchased online.

If consumers adopt m-Commerce, then they can avail festival offers like cash backs, discount coupons etc. track delivery system and are able to return the products if desired which is difficult in offline shopping because of the time constraints as well as overcrowded shopping environment. Moreover, as there in no middlemen between producers and consumers, the later will be able to get product at a reasonable price. As the convenience involved with receiving promotional offers and comfortability involved with m-Commerce have attracted people towards this medium, this aspect should be given due focus by designing customer friendly interfaces for easy comparison and selection of their preferred products and services.

Generation Z are brought up in a rapidly growing technological era, their attitude and buying behaviour are largely shaped by technology which has become an inseparable part of their life. The young generations are less sensitive to price and have better disposable income which may attract them to involve more with m-Commerce. Marketers should consider the age aspect when designing product and fixing prices to different age groups. As it was found that there are differences in the views of m-Commerce users from different age group regarding comfortability of using cell phone in online transaction, the App or website user interface designers should consider the requirement of different age groups by designing user friendly interactive interfaces as well as by customizing the offerings for these groups.

In the earlier days it was observed that tech-savvy men are more involved with m- Commerce, slowly it is changing as more women are into workforce and have access to debit and credit card and other payment infrastructures; they create mobile wallets and more actively involved with m-Commerce transaction. As more women are into full time jobs, enjoying more purchasing power than before and making most of the decisions in the family especially regarding consumer goods and services, this gender category can be given due care by marketers while developing suitable strategies. Users from different occupational background have different opinion regarding the convenience involved in operating mobile phones as well as getting information about promotional offers, this aspectshould be considered while designing promotional offers as well as marketing strategy.

Perceived usefulness, another important driver of m-Commerce, gives vast amount of information about product and services, make life better and easier as well as help the users of all age group in completing the task on time. Irrespective of gender, people have opined that it is easy to search and compare product and services in m-Commerce transaction, m-Commerce service providers as well as site/ app designer should ensure that the interface should help users for easy search and also should make enough provision for comparison of different products or services. There are differences in the views of married and unmarried people regarding the usefulness of m-Commerce transaction in terms of getting latest information about product and services thereby making their life better.

The m-Commerce appdevelopers, service providers and m-Commerce merchants should ensure that m-Commerce experience should be enjoyable and informative to users as well as it should help them to have a quality life ahead with better and more variety of products and services. Users from joint and nuclear family differs in their opinion regarding the comfortability to search and compare products and services via m-Commerce.

The m-Commerce users should have quick and easy access to their preferred retail stores and it should provide a better user experience with optimised applications and websites with streamlined shopping experience which help them to navigate easily with few clicks and find and compare the products/services of their choice. Occupational background of users exert great influence as there was difference in the opinion of users regarding the comfortability involved with searching and comparing products or services as well as in accomplishing the task in a better way, thereby making their life better and smoother. This issue can be overcome by making the interface more user-friendly and by allowing product comparison as well as displaying the preferred product based on users' search history which helps in accomplishing the task in a much easier and pleasant way.

In a country like India, social norms play a significant role in influencing online purchasing decision of people. Normally people wait to get the feedback of early adopters before indulging in buying new products and services to mitigate the risk aspect involved with online transactions. Friends, colleagues and relatives as well as web-based social communities play a vital role in the online buying especially through mobile.

Web based social communities allow consumers to share their experience or reviews as well as chat with community members regarding the product or services bought online which drive lot of traffic to retail sites which has actually helped to develop web-based shopping among members. Even though friends and colleagues are using m-Commerce and they want others also to use m-Commerce, users from different age group opined that they trust their own intuition than others advice. As different age groups have different expectation, content developers as well as m-Commerce service providers should develop suitable content catering to the requirement of different age groups. It was also found that irrespective of occupational background, majority of friends and relatives have used m-Commerce.

Users from different age group have different opinion regarding the knowledge and ability to use m-Commerce services, have high intention to purchase via mobile phones, have necessary hardware, software and network services required to use m-Commerce services and are waiting to receive m-Commerce services as well as will recommend m-Commerce services to others. When users perceived that they have control over their behaviour which helps them to reduce the risk and uncertainty (Featherman & Pavlou, 2003)⁷ involved with adopting m-Commerce services. So, it is very important to convince them that m-Commerce transactions are entirely within their control and ensure safety and security measures involved with it.

There is difference in the views of users from different occupational background regarding the perceived behavioural control involved in m-Commerce transaction, m-Commerce companies should address this issue to make sure that all are able to use m-Commerce services without any difficulty and should create confidence in them that m-Commerce transactions are within their control and no third party is exerting undue influence and control over m-Commerce services. As there is difference in their views regarding the use of hardware, software and network services required in m-Commerce services, it has become necessary to educate people from different occupational background regarding the basic facilities required in adopting m-Commerce.

Different age groups have shown difference regarding their attitude towards m-commerce transaction and opined that they do online scanning before making purchased decision and really enjoy buying products as well as really satisfied with m-commerce services. The association of attitude with occupation revealed significant result with criteria regarding their satisfaction level during m-Commerce transaction, enjoyment they experienced during purchase through mobile and the positive views they hold regarding m-Commerce transaction. People from different occupational background differs in their views regarding the enjoyment they experienced and their positive views as well as satisfaction involved with m-Commerce transaction. So, m-Commerce merchants should consider the age and occupation of target consumers and design the product and services accordingly.

Users of different age has different views with regard to cost involved with adopting m-Commerce and opined that hassle free shopping through smartphone influences m-Commerce adoption and would adopt it if privacy aspect is taken care off and shown willingness to strongly recommend the service to others. As people have different opinion regarding cost and privacy involved with m-Commerce, this aspect requires special attention. Married and unmarried users have different views with respect to strongly recommending the m-Commerce applications to others. In a democratic country like India, reference play an important role. If some people are skeptical about strongly recommending the m-Commerce transaction to other, it is going to affect the growth of m-commerce business as word of mouth is an important way of stimulating people in buying goods and services. So, this issue requires immediate attention of m-Commerce service providers.

Users from different occupational background differs in their view regarding trust involved with m-Commerce transaction and opined that they would adopt m-Commerce as they trust it, provided the privacy aspect is taken care of and also have revealed though the recent laws help to reduce the risk which helps in better m-Commerce adoption but the cost of m-Commerce transaction are found to be more than other channels which may inhibit its adoption.

This means that m-Commerce service providers should focus on cost, privacy and perceived trust issues involved with m-Commerce transaction by providing variety products at competitive price and by ensuring that transactions are performed smoothly and securely and also ensuring that the personal and financial information will remain secure and will never be disclosed with third party. Creating trust in consumers can help in improving the adoption intention. Users of different income level have also opined those recent laws help in reducing the risk involved with m-commerce transaction. The results also revealed that user friendliness of m-Commerce App or Website interface, hassle free shopping through smart phone and positive attitude of society towards m-Commerce influence the adoption intention.

6.3: FINDINGS OF THE KRUSKAL-WALLIS TEST OF SELECTED M-COMMERCE USERS ON SELECTED ATTRIBUTES VIZ., PERCEIVED COST, PERSONALISATION, PRIVACY, PERCEIVED TRUST, PERCEIVED RISK, PERCEIVED EASE OF USE, PERCEIVED USEFULNESS, SOCIAL NORMS AND PERCEIVED BEHAVIOURAL CONTROL, ATTITUDE AND ADOPTION INTENTION OF M-COMMERCE IN SELECTED FOUR CITIES OF GUJARAT

The hypothesis was tested using the Kruskal-Wallis non-parametric test. "There is no difference in the opinion of selected m-Commerce users for the m-Commerce drives namely, perceived cost, personalisation, privacy, Perceived Trust, Perceived Risk, perceived ease of use, perceived usefulness, social norms, and perceived behavioural control; the attitude and the adoption intention for m-Commerce based on the city in which they live". The results of the test are presented in Table Number 6.14 as follows:

Table Number: 6.14:
Results of Independent Samples Kruskal-Wallis Test

Sr. No	Null Hypotheses	Level of Significance	Test Result
1	The distribution of Perceived Cost is same	0.000**	Rejected
	across categories of city		
2	The distribution of Personalisation is same	0.000**	Rejected
	across categories of city		
3	The distribution of Privacy is same across	0.000**	Rejected
	categories of city		
4	The distribution of Trust is same across	0.039*	Rejected
	categories of city		
5	The distribution of Risk is same across	0.584	Fail to Reject
	categories of city		
6	The distribution of Ease of Use is same	0.000**	Rejected
	across categories of city		
7	The distribution of Perceived Usefulness is	0.000**	Rejected
	same across categories of city		
8	The distribution of Social Norms is same	0.000**	Rejected
	across categories of city		
9	The distribution of Perceived Behavioural	0.001**	Rejected
	Control is same across categories of city		
10	The distribution of Attitude is same across	0.000**	Rejected
	categories of city		
11	The distribution of Adoption Intention is	0.004**	Rejected
	same across categories of city		
	Difference is significant at .01 level Difference is significant at .05 level		

Except for 'Perceived Risk,' there was a variation in perception between persons living in different cities in terms of attitude, adoption intention of the m-Commerce application, and the selected m-Commerce drives, as shown in table 6.14. The difference was examined to be significant at 0.01 level of significance for perceived cost, personalisation, privacy, ease of use, perceived usefulness, social norms, perceived behavioural control, attitude and the adoption intention. The difference was found significant at 0.05 level for the m-Commerce driver 'Perceived Trust'. Hence, the m-Commerce users residing in selected four cities differ significantly with regard to their perception regarding selected attributes, except for the 'Perceived Risk'. Further, Post Hoc Test was carried out to identify the cities amongst which there was a difference in the perception for m-Commerce drivers, attitude and adoption intention for the m-Commerce applications.

6.3.1: Post Hoc Test to Identify Differences in the Opinion of Mobile Commerce Users in terms of Perceived Cost, Personalisation, Privacy, Perceived Trust, Perceived Risk, Perceived Ease of Use, Perceived Usefulness, Social Norms, Perceived Behavioural Control, Attitude and Adoption Intention from Four Selected Cities of Gujarat State:

From four cities in Gujarat, a Post Hoc Test was used to find differences in the mean score of mobile commerce users' opinions on different drivers of m-Commerce adoption, such as perceived cost, personalisation, privacy, Perceived Trust, Perceived Risk, perceived ease of use, perceived usefulness, social norms, perceived behavioural control, attitude, and adoption intention. The results are given in the following tables ranging from Table Number 6.15 to 6.24.

6.3.1.1: Post Hoc Test to Know the Difference in the Views of m-Commerce Users Regarding the Aspect of Perceived Cost Involved in Use of m-Commerce Applications

A post hoc test was conducted to examine the variations in m-Commerce users' perceptions of the Perceived Cost related with m-Commerce adoption intentions, and the results are shown in Table 6.15.

Table Number: 6.15: City-Wise Differences in the Perception of Selected Users towards
Perceived Cost involved in Adopting m-Commerce Applications

Selected Cities	Mean Rank	Test		Std. Test		
	Score	Statistic	Std. Error	Statistic	Sig.	Adj. Sig
Ahmedabad-	630.59- 758.10	-127.505	32.215	-3.958	0.000	0.000**
Rajkot						
Ahmedabad- Surat	630.59- 761.10	-130.507	27.972	-4.666	0.000	0.000**
Ahmedabad-	630.59-883.72	-253.131	31.295	8.089	0.000	0.000**
Vadodara						
Surat-Rajkot	761.10-758.10	3.002	33.185	0.090	0.928	1.000
Rajkot- Vadodara	758.10- 883.72	-125.626	36.030	3.487	0.000	0.003**
Surat-Vadodara	761.10- 883.72	-122.624	32.292	3.797	0.000	0.001**
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Note: ** Difference is significant at .01 level (2- tailed)

The Bonferroni correction has been used to adjust the significance value

The city of Vadodara has the greatest mean rank, whereas Ahmedabad has the lowest, as seen in Table 6.15. The high mean rank suggests that perceived cost has a positive influence on users' perceptions of m-Commerce. Based on the results of post hoc test, one group can be formed between Surat and Rajkot as the perception about the cost was not statistically significant between these cities. Whereas, the difference of mean rank score was statistically significant among the other cities under study.

The users of m-Commerce are of the opinion that smartphones as well as internet services are not expensive, even m-Commerce transaction cost are low and easily affordable to them. Their main concern is not the cost of smartphone or network connection expenditure but they were worried about the fraudulent charges that they may have to pay if they are continuing with m-Commerce transaction. M-Commerce service providers as well as companies should focus on this issue as the cost (psychological) involved with m-Commerce affect their purchase decision, m-Commerce companies should create confidence among the users and has also to make the system more transparent by giving all the details regarding the transaction to users.

6.3.1.2 : Post Hoc Test to Know the Difference in the Views of m-Commerce Users Regarding Aspect of Personalisation Involved in Use of m-Commerce Applications

Table 6.16 shows the results of a post hoc test conducted to determine the differences in m-Commerce consumers' perceptions of Personalisation with related to m-Commerce adoption decisions.

Table Number: 6.16: City-Wise Differences in the Perception of Selected Users towards the Personalisation Aspect involved Use of m-Commerce Applications

Mean Rank	Test		Std. Test		
Score	Statistic	Std. Error	Statistic	Sig.	Adj. Sig
673.75-634.78	38.975	32.057	1.216	0.224	1.000
673.75-605.33	68.418	27.835	2.458	0.014	0.084
673.75-1150.28	-476.527	31.141	15.302	0.000	0.000**
605.33-634.78	-29.443	33.002	892	0.373	1.000
634.78-1150.28	-515.502	35.853	14.378	0.000	0.000**
605.33-1150.28	-544.945	32.134	16.959	0.000	0.000**
	Score 673.75-634.78 673.75-605.33 673.75-1150.28 605.33-634.78 634.78-1150.28	Score Statistic 673.75-634.78 38.975 673.75-605.33 68.418 673.75-1150.28 -476.527 605.33-634.78 -29.443 634.78-1150.28 -515.502	Score Statistic Std. Error 673.75-634.78 38.975 32.057 673.75-605.33 68.418 27.835 673.75-1150.28 -476.527 31.141 605.33-634.78 -29.443 33.002 634.78-1150.28 -515.502 35.853	Score Statistic Std. Error Statistic 673.75-634.78 38.975 32.057 1.216 673.75-605.33 68.418 27.835 2.458 673.75-1150.28 -476.527 31.141 15.302 605.33-634.78 -29.443 33.002 892 634.78-1150.28 -515.502 35.853 14.378	Score Statistic Std. Error Statistic Sig. 673.75-634.78 38.975 32.057 1.216 0.224 673.75-605.33 68.418 27.835 2.458 0.014 673.75-1150.28 -476.527 31.141 15.302 0.000 605.33-634.78 -29.443 33.002 892 0.373 634.78-1150.28 -515.502 35.853 14.378 0.000

Note: ** Difference is significant at .01 level (2- tailed)

The Bonferroni correction has been used to adjust the significance value

The greatest mean rank is found in Vadodara, while the lowest is found in Surat (Table 6.16). The high mean rank suggests that users are enthusiastic in personalizing m-Commerce services. Thus, one group consisting of users in Ahmedabad, Surat and Rajkot cities can be formed as there is no significant difference in the mean rank scores of these cities. The group that has significant difference in the opinion regarding personalisation is the m-Commerce users of Vadodara city, as the difference was significant among the group and Vadodara city.

Nowadays companies are delivering personalised products and services to customers by showing varied quality content, product reviews, purchase history as well as customized offers either through mobile applications or through company websites as personalisation is equally important to engage customers as well as to retain them.

As the users in all the cities have shown their willingness to receive personalised message, m-Commerce vendors should develop strategies to explore this opportunity. M-Commerce service providers, by analyzing users online surfing history and buying pattern should be able to identify their preferences and can customize offers to create immediate sales. Even though users revealed that it is necessary to receive information of their product choice and want m-Commerce vendors to understand the customers changing needs and wants, they don't want to be bombarded with messages from m-Commerce senders. Hence, m-Commerce marketers should understand the sensitivity of customer regarding unnecessary messages. As the m-Commerce users are ready to share information about their preferred choices, companies should only send the relevant content preferably after asking for their permission to receive promotional offers and other messages from companies. The results of post hoc test showed that except users of Vadodara city, users of other cities were not able to enjoy the advantage of personalisation involved with m-Commerce, so m-Commerce service providers as well as app developers should concentrate on this aspect to improve the adoption rate.

6.3.1.3 : Post Hoc Test to Know the Difference in the Views of m-Commerce Users Regarding the Privacy Aspect Involved in Use of m-Commerce Applications

Table 6.17 shows the results of a post hoc test that was run to determine the differences in m-Commerce consumers' perceptions of privacy as it relates to their adoption intentions.

Table Number: 6.17: City-Wise Differences in the Perception of Selected Users towards Privacy
Aspect Involved in Use of m-Commerce Applications

Mean Rank	Test	Std.	Std. Test		
Score	Statistic	Error	Statistic	Sig.	Adj. Sig
663.56-616.95	46.607	31.816	1.465	0.143	0.858
663.56-656.20	7.360	27.626	.266	0.790	1.000
663.56- 1109.60	-446.045	30.907	14.432	0.000	0.000**
656.20-616.95	39.247	32.774	1.197	0.231	1.000
616.95-1109.60	-492.653	35.583	13.845	0.000	0.000**
656.20-1109.60	-453.406	31.892	14.217	0.000	0.000**
	Score 663.56-616.95 663.56-656.20 663.56-1109.60 656.20-616.95 616.95-1109.60	Score Statistic 663.56-616.95 46.607 663.56-656.20 7.360 663.56-1109.60 -446.045 656.20-616.95 39.247 616.95-1109.60 -492.653	Score Statistic Error 663.56-616.95 46.607 31.816 663.56-656.20 7.360 27.626 663.56-1109.60 -446.045 30.907 656.20-616.95 39.247 32.774 616.95-1109.60 -492.653 35.583	Score Statistic Error Statistic 663.56-616.95 46.607 31.816 1.465 663.56-656.20 7.360 27.626 .266 663.56-1109.60 -446.045 30.907 14.432 656.20-616.95 39.247 32.774 1.197 616.95-1109.60 -492.653 35.583 13.845	Score Statistic Error Statistic Sig. 663.56-616.95 46.607 31.816 1.465 0.143 663.56-656.20 7.360 27.626 .266 0.790 663.56-1109.60 -446.045 30.907 14.432 0.000 656.20-616.95 39.247 32.774 1.197 0.231 616.95-1109.60 -492.653 35.583 13.845 0.000

Note: ** Difference is significant at .01 level (2- tailed)

The Bonferroni correction has been used to adjust the significance value

Table 6.17 shows the mean rank score for privacy concerns in m-Commerce adoption, with Vadodara having the highest mean rank score and Ahmedabad having the lowest. The highest mean rank indicates that there is a higher level of concern about the privacy implications of m-Commerce adoption. Based on the level of significance difference among the cities, one group can be formed of Ahmedabad, Surat and Rajkot cities where the difference was not statistically significant.

While, the mobile commerce users in Vadodara had the statistically significant different opinion about the privacy compared to other cities under study.

In order to make m-Commerce transaction more efficient and a pleasant experience to users, merchants have used different ways to collect data regarding consumers' taste and preference which has led to violate the digital privacy of the users as these companies started collecting personal, financial as well as browsing data of users to boost up the sales. Digital privacy involved proper usage, handling, processing and storage of personal information. Apart from companies, search engine also collects and keep browsing history and track the websites consumers have visited, use cookies and even track IP address and based on browsing, shopping and social media preferences create consumer profiling which help them to involve in personalised marketing with the prospective consumers. Profiling is a serious issue which may lead to data breaches. Cookies are believed to be harmless and helpful in best serving the users, but it collects and retain information in the website regarding your login, preference and other details. Google and Amazon collect vast amount of user's information by using cookies which help companies to browse and track your shopping and web surfing habits. Many applications ask details regarding location, name, phone numbers etc. and ask permission to access contacts, messages and even camera also thus intruding into consumers' private space. The study revealed that privacy has become a sensitive issue among users, m-Commerce should adopt prompt measures to protect consumer privacy. Even though companies are increasingly adopting measures like Data masking, password encryption, OTP based login systems, and checking and authentication of users and other measures to ensure that data would be accessed only by authorized parties, privacy issues need to be tackled by introducing stringent laws against invaders of privacy.

6.3.1.4 : Post Hoc Test to Know the Difference in the Views of m-Commerce Users Regarding the Aspect of Perceived Trust in Use of m-Commerce Applications

Table 6.18 shows the results of a post hoc test done to determine the differences in m-Commerce consumers' perceptions of Perceived Trust and m-Commerce Adoption Intention.

Table Number: 6.18: City-Wise Differences in the Perception of Selected Users Regarding the Aspect of Perceived Trust in Use of m-Commerce Applications

Mean Rank	Test	Std.	Std. Test		Adj.
Score	Statistic	Error	Statistic	Sig.	Sig
703.82-	-19.500	32.313	603	0.546	1.000
723.32					
703.82-	-63.931	28.057	-2.279	0.023	0.136
767.75					
703.82-	-75.709	31.389	2.412	0.016	0.095
779.52					
767.75-	44.431	33.286	1.335	0.182	1.000
723.32					
723.32-	-56.209	36.139	1.555	0.120	0.719
779.52					
767.75-	-11.778	32.390	.364	0.716	1.000
779.52					
	703.82- 703.82- 767.75 703.82- 779.52 767.75- 723.32 723.32- 779.52 767.75-	Score Statistic 703.82- -19.500 723.32 -63.931 767.75 -75.709 79.52 -75.709 767.75- 44.431 723.32- -56.209 767.75- -11.778	Score Statistic Error 703.82- 723.32 -19.500 32.313 703.82- 767.75 -63.931 28.057 703.82- 779.52 -75.709 31.389 767.75- 723.32 44.431 33.286 723.32- 779.52 -56.209 36.139 767.75- 767.75- -11.778 32.390	Score Statistic Error Statistic 703.82- 723.32 -19.500 32.313 603 703.82- 767.75 -63.931 28.057 -2.279 703.82- 779.52 -75.709 31.389 2.412 767.75- 723.32 44.431 33.286 1.335 723.32- 779.52 -56.209 36.139 1.555 767.75- 767.75- -11.778 32.390 .364	Score Statistic Error Statistic Sig. 703.82- 723.32 -19.500 32.313 603 0.546 703.82- 767.75 -63.931 28.057 -2.279 0.023 703.82- 779.52 -75.709 31.389 2.412 0.016 767.75- 723.32 44.431 33.286 1.335 0.182 723.32- 779.52 -56.209 36.139 1.555 0.120 767.75- 767.75- -11.778 32.390 .364 0.716

Note: ** Difference is significant at .01 level (2- tailed)

The Bonferroni correction has been used to adjust the significance value

In comparison to the other cities studied, Vadodara m-Commerce users had the highest mean rank score (Table 6.18). The high mean rank implies that when utilising m-Commerce, there is a high reliance on perceived trust. Though, the differences in the mean rank score were statistically insignificant at 0.05 level of significance. The major difference was identified between the Vadodara and Ahmedabad city which were significant at 0.10 level of significance. Trust in the service provider as well as in the system is very important for its adoption and continuation, m-Commerce app developers and service providers should try to develop trust among users to mitigate the problem with safety and security issues.

Majority of the users felt confident during online purchases and also felt that payment process is smooth and secure. The m-Commerce users also opined that m-Commerce vendors are highly committed in serving the customers and fulfilling their promises and also suggested that technological advancement as well as displaying assurance make online transaction trust worthy. Amazingly they showed confidence in giving card details while engaging in online transaction but would like to have opt in and opt out option regarding sharing personal information with third parties. As users showed trust on m-Commerce vendors, m-Commerce companies as well as marketers should be able to build and retain trust on them for repeat purchase and customer retention.

6.3.1.5 : Post Hoc Test to Know the Difference in the Views of m-Commerce Users Regarding the Aspect of Perceived Ease of Use in the Use of m-Commerce Applications

Table 6.19 shows the results of a post hoc test conducted to determine the differences in m-Commerce users' perceptions of Perceived Ease of Use in relation to m-Commerce Adoption Intention.

Table Number: 6.19:
City-Wise Differences in the Perception of Selected Users towards Perceived Ease of Use in the
Use of m-Commerce Applications

Selected Cities	Mean Rank	Test		Std. Test		
	Score	Statistic	Std. Error	Statistic	Sig.	Adj. Sig
Ahmedabad- Rajkot	875.12-408.65	466.464	31.888	14.628	0.000	0.000**
Ahmedabad- Surat	875.12-638.36	236.757	27.688	8.551	0.000	0.000**
Ahmedabad- Vadodara	875.12-961.33	-86.212	30.976	2.783	0.005	0.032*
Surat- Rajkot	638.36-408.65	229.707	32.848	6.993	0.000	0.000**
Rajkot- Vadodara	408.65- 961.33	-552.676	35.664	15.497	0.000	0.000**
Surat-Vadodara	638.36-961.33	-322.969	31.964	10.104	0.000	0.000**

Note: ** Difference is significant at .01 level (2- tailed)

The Bonferroni correction has been used to adjust the significance value

Table 6.19 can be used to figure out that Vadodara city has the highest mean rank score, followed by Ahmedabad, Surat, and Rajkot cities in the order they are in. The highest mean rank indicates high regard for perceived ease of use involved with m-Commerce transactions. Based on the level of significance for the difference in the mean rank score it was found that score for difference between the cities under the study were statistically significant, hence opinion about the perceived ease of use of m-Commerce applications should be viewed differently based on the city in which the respondents live. Majority of the users revealed that indulging in m-Commerce activities are quite easy and comfortable and the applications helped them in getting information about promotional offers and coupons. They also commented that it was easy to become skillful in using smartphone for online transaction. As users were comfortable in using mobile for purchasing goods and services, it provided lot of opportunities for companies to explore this medium to the maximum extent and have financial advantage with theuse of different m-Commerce applications.

^{*} Difference is significant at .05 level (2- tailed)

6.3.1.6: Post Hoc Test to Know the Difference in the Views of m-Commerce Users Regarding the Aspect of Perceived Usefulness in the Use of m-Commerce Applications

Table 6.20 shows the results of a post hoc test conducted to determine the differences in m-Commerce users' perceptions of the perceived usefulness of m-Commerce adoption intentions.

Table Number: 6.20: City-Wise Differences in the Perception of Selected Users towards Perceived Usefulness in the **Use of m-Commerce Applications**

Selected Cities	Mean Rank	Test	Std.	Std. Test				
	Score	Statistic	Error	Statistic	Sig.	Adj. Sig		
Ahmedabad- Rajkot	579.45-702.16	-122.707	31.981	-3.837	0.000	0.001**		
Ahmedabad- Surat	579.45-742.42	-162.969	27.769	-5.869	0.000	0.000**		
Ahmedabad- Vadodara	579.45-1050.39	-470.942	31.067	15.159	0.000	0.000**		
Surat- Rajkot	742.42-702.16	40.262	32.944	1.222	0.222	1.000		
Rajkot- Vadodara	702.16-1050.39	-348.235	35.768	9.736	0.000	0.000**		
Surat-Vadodara	742.42- 1050.39	-307.973	32.058	9.607	0.000	0.000**		
Note: ** Difference is significant at .01 level (2- tailed)								

The Bonferroni correction has been used to adjust the significance value

Table number 6.20 exhibits the mean rank score of the perceived usefulness in the use of m-Commerce applications. The highest mean rank was found for Vadodara whereas the lowest was reported for Ahmedabad city. Based on the results of post hoc test, one group can be formed between Surat and Rajkot as the perception about the perceived usefulness was not statistically significant between these cities. While, difference in the mean rank score were statistically significant among the other cities under study.

The response of users regarding the usefulness involved with m-Commerce transactions are quite encouraging as three forth of the users have agreed that m-Commerce makes life simpler, helps in comparing products and services, give information about new products and services before others, m-Commerce users are better informed than others and they feel that m-Commerce reflect their personality. If a person believes that using a particular system will definitely improve his/her performance, then he/she will adopt it. It is the duty of the m-Commerce companies as well as m-Commerce vendors to focus on the usefulness involved with m-Commerce while developing marketing strategy.

6.3.1.7: Post Hoc Test to Know the Difference in the Views of m-Commerce Users Regarding the Aspect of Social Norms in the Use of m-Commerce Applications

Table 6.21 shows the results of a post hoc test done to determine the differences in m-Commerce users' perceptions of social norms associated with m-Commerce Adoption Intention.

Table Number: 6.21:
City-Wise Differences in the Perception of Selected Users towards the Social Norms in the Use of m-Commerce Applications

Mean Rank		Std.	Std. Test		
Score	Test Statistic	Error	Statistic	Sig.	Adj. Sig
552.56-599.44	-146.876	32.321	-4.544	0.000	0.000**
552.56- 697.77	-145.208	28.065	-5.174	0.000	0.000**
552.56-1164.67	-612.103	31.398	19.495	0.000	0.000**
697.77-599.44	98.33	33.295	050	0.960	1.000
599.44-1164.67	-465.228	36.149	12.870	0.000	0.000**
697.77-1164.67	-466.895	32.399	14.411	0.000	0.000**
	Score 552.56-599.44 552.56-697.77 552.56-1164.67 697.77-599.44 599.44-1164.67	Score Test Statistic 552.56-599.44 -146.876 552.56-697.77 -145.208 552.56-1164.67 -612.103 697.77-599.44 98.33 599.44-1164.67 -465.228	Score Test Statistic Error 552.56-599.44 -146.876 32.321 552.56-697.77 -145.208 28.065 552.56-1164.67 -612.103 31.398 697.77-599.44 98.33 33.295 599.44-1164.67 -465.228 36.149	Score Test Statistic Error Statistic 552.56-599.44 -146.876 32.321 -4.544 552.56-697.77 -145.208 28.065 -5.174 552.56-1164.67 -612.103 31.398 19.495 697.77-599.44 98.33 33.295 050 599.44-1164.67 -465.228 36.149 12.870	Score Test Statistic Error Statistic Sig. 552.56-599.44 -146.876 32.321 -4.544 0.000 552.56-697.77 -145.208 28.065 -5.174 0.000 552.56-1164.67 -612.103 31.398 19.495 0.000 697.77-599.44 98.33 33.295 050 0.960 599.44-1164.67 -465.228 36.149 12.870 0.000

Note: ** Difference is significant at .01 level (2- tailed)

The Bonferroni correction has been used to adjust the significance value

From the table 6.21, it can be inferred that Vadodara city has the highest mean rank and Ahmedabad city has the lowest mean rank. The high mean rank means the high influence of social norms in Vadodara compared to other selected cities. From the mean rank score, it can be inferred that Surat and Rajkot can be grouped together as the difference in the mean rank scores were not statistically significant between these cities.

As the study reveals social norms play very significance role on a country like India where family, friends, relatives, colleagues as mass media influence the adoption decision. The influence was found to be high in the cultural city of Vadodara, having cosmopolitan culture where people from different part of the country interact with each other and share their views regarding products and services. Social norms are not playing a significant role in Ahmedabad where people, even if they consult with each other regarding buying new products and services, final decision is taken based on a person's intuition than that of society. M-Commerce merchants as well as m-Commerce vendors should consider this difference while designing marketing strategy and developing offers to these customer groups. Reference group can exert a great influence in Vadodara, so they can be targeted with attractive offers to promote sale of product and services.

6.3.1.8 : Post Hoc Test to Know the Difference in the Views of m-Commerce Users Regarding the Aspect of Perceived Behavioural Control in the Use of m-Commerce Applications

Table 6.22 shows the findings of a post hoc test that was undertaken to determine whether there was a city-by-city difference in m-Commerce users' perceptions of behavioural control in the use of m-Commerce applications.

Table Number: 6.22: City-Wise Differences in the Perception of Selected Users towards Perceived Behavioural Control in the Use of m-Commerce Applications

Selected Cities	Mean Rank	Test	Std.	Std. Test				
	Score	Statistic	Error	Statistic	Sig.	Adj. Sig		
Ahmedabad- Rajkot	737.13-809.27	-72.137	32.338	-2.231	0.026	0.154		
Surat- Ahmedabad	683.57-737.13	-53.564	28.079	1.908	0.056	0.339		
Ahmedabad- Vadodara	737.13-766.89	-29.755	31.414	.947	0.344	1.000		
Surat- Rajkot	683.57-809.27	-125.701	33.312	-3.773	0.000	0.001**		
Rajkot- Vadodara	809.27-766.89	42.382	36.168	-1.172	0.241	1.000		
Surat-Vadodara	683.57-766.89	-83.319	32.416	2.570	0.010	0.061		
Note: ** Difference is significant at .01 level (2- tailed)								

The Bonferroni correction has been used to adjust the significance value

From Table number 6.22, it can be inferred that Rajkot has the highest mean rank score, followed by Vadodara, Ahmedabad and Surat cities respectively. The high mean rank means high influence of perceived behavioural control in m-Commerce Adoption Intention. From the table, it is identified that the score of Surat and Rajkot city were statistically different from one another at 0.01 level of significance. For the other cities under the study the difference in the score were not found statistically significant. Hence no clear group can be formed for the perceived behavioural control aspect. But the clear implications can be drawn for users of Surat and Rajkot cities of Gujarat State. As revealed here, perceived behavioural control play a very significant role in the decision-making process of people in Rajkot city as they have opined that with their knowledge, ability and the resources they are having, m-commerce users in the city felt that transactions are within their control and have high confidence in their ability to take own decision while engaging in m-commerce. As perceived behavioural control is not strong in Surat city, m-commerce companies can target their reference group who will play a major role in their purchase decision and can design marketing programmes accordingly.

6.3.1.9 : Post Hoc Test to Know the Difference in the Views of m-Commerce Users Regarding Attitude towards m-Commerce Adoption Intention

Table 6.23 shows the findings of a post hoc test that was undertaken to see if there was a change in m-Commerce users' attitudes toward m-Commerce adoption intentions.

Table Number: 6.23:
City-Wise Differences in the Opinion of m-Commerce Users towards Attitude for m-Commerce
Applications

Selected Cities	Mean Rank	Test	Std.	Std. Test		
	Score	Statistic	Error	Statistic	Sig.	Adj. Sig
Ahmedabad- Rajkot	756.80-610.21	146.591	31.957	4.587	.000	.000**
Ahmedabad- Surat	756.80-707.96	48.845	27.748	1.760	.078	.470
Ahmedabad- Vadodara	756.80-879.13	-122.330	31.044	3.941	.000	.000**
Surat- Rajkot	707.96-610.21	97.746	32.920	2.969	.003	.018*
Rajkot- Vadodara	610.21-879.13	-268.921	35.741	7.524	.000	.000**
Surat-Vadodara	707.96-879.13	-171.176	32.034	5.344	.000	.000**

Note: ** Difference is significant at .01 level (2- tailed)

The Bonferroni correction has been used to adjust the significance value

^{*} Difference is significant at .05 level (2- tailed)

Table number 6.23 revealed that Rajkot city has the lowest mean rank score compared to Surat, Ahmedabad and Vadodara cities. The highest mean rank score showed more positive attitude for the use of m-Commerce application which was shown in Vadodara city. From the mean rank score, it can be inferred that Ahmedabad and Surat city can be grouped together as the difference in the mean rank scores were not statistically significant between these cities. While, difference in the mean rank score for the attitude for m-Commerce applications were statistically significant among the other cities under study.

The study revealed positive attitude of m-Commerce users in Vadodara which proved that Vadodara has high potential regarding the growth of m-Commerce compare to other selected cities of Gujarat. The users in Vadodara have opined that they have benefited from m-commerce and have positive perception towards mobile coupons and other discount offers. The users have opined that they do online scanning before buying products, m-Commerce merchants should help them with variety of products and easy to compare user interfaces so that the process of searching and buying can be an enjoyable experience for the users. A Rajkot users have low positive attitude compared to other three selected cities, m-Commerce service providers should try to find the reason for this and try to incorporate more lucrative offers as well as have to have to build trust, thereby helping them to overcome insecurity regarding m-Commerce transactions. As Rajkot users have high level of control over their transaction (as shown in Table 6.23), it is very important to convince them about the benefits involved with m-Commerce. As there is always a feeling of insecurity involved with online transaction, user perform online scanning to get reviews, companies should provide QR code so that consumers can scan it much faster and get required information.

6.3.1.10 : Post Hoc Test to Know the Difference in the Views of m-Commerce Users Regarding m-Commerce Adoption Intention

Table 6.24 shows the results of a post hoc test that was used to determine whether there was a difference in m-Commerce users' perspectives on adoption intentions for m-Commerce applications.

Table Number: 6.24:
City-Wise Differences in the Adoption Intention of M-Commerce Applications

Selected Cities	Mean Rank	Test	Std.	Std. Test		
	Score	Statistic	Error	Statistic	Sig.	Adj. Sig
Ahmedabad- Rajkot	717.79- 688.55	29.243	32.406	.902	0.367	1.000
Ahmedabad- Surat	717.79-752.96	-35.170	28.138	-1.250	0.211	1.000
Ahmedabad- Vadodara	717.79-808.88	-91.090	31.480	2.894	0.004	0.023*
Surat- Rajkot	752.96-688.55	64.412	33.382	1.930	0.054	0.322
Rajkot- Vadodara	688.55-808.88	-120.332	36.243	3.320	0.001	0.005**
Surat-Vadodara	752.96-808.88	-55.920	32.483	1.721	0.085	0.511

Note: ** Difference is significant at .01 level (2- tailed)

The Bonferroni correction has been used to adjust the significance value

^{*} Difference is significant at .05 level (2- tailed)

Table 6.24 exhibits the mean rank score regarding intention to adopt m-Commerce. Vadodara has the highest score followed by Surat, Ahmedabad and Rajkot cities. The high mean score showed higher intention to adopt m-Commerce. The differences in the mean rank score for the adoption intention for m-Commerce applications were statistically significant between the Vadodara city with the Ahmedabad and Rajkot city. While, the difference between the other cities were not found statistically significant. The response of the users from Vadodara city showed that they have high intention to adopt m-Commerce transaction which has to be explored properly by m-Commerce merchants by designing personalised offers at reasonable price. Due to the recent policies regarding security of online transaction, m-Commerce users have developed trust in the system which has to be reassured by m-Commerce service providers by ensuring that their no data breach regarding m-Commerce users personal and financial details which helps in increasing the scale of adoption. Compared to other three cities, adoption rate is low in Rajkot, the m-Commerce merchants should find reasons for low adoption in Rajkot city and also try to attract users further by giving attractive promotional schemes and customized offers and should also ensure that hassle free shopping via mobile phones as well protecting their privacy to reduce risk and uncertainty involved with m-Commerce transaction, all these measures can definitely improve the adoption intention of users in Rajkot city.

6.4: FINDINGS OF STRUCTURAL EQUATION MODELLING [SEM] USING ANALYSIS OF MOMENT STRUCTURES [AMOS]

The study contains 81 statements identifying the 11 variables/constructs that consists of perceived cost (PC 1 to 9), personalisation (PERS 1 to 5), privacy (PRY 1 to 3), Perceived Trust (TR 1 to 9), perceived risk (RISK 1 to 7), perceived ease of use (EOU 1 to 5), perceived usefulness (PU 1 to 7), social norms (SN 1 to 4), perceived behavioural controls (BC 1to 8), attitude (ATT 1 to 9) and adoption intention (AD 1 to 11). Confirmatory factor analysis was used to determine the statement's significance in the formation of the construct. Based on the Confirmatory factor analysis 21 statements were removed due to the poor factor loading. The research model was tested on the remaining 60 statements. Details of the statements are provided in Table 6.25 (Annexure number V).

The research study has developed Structural Equation Model [SEM] by using 11 constructs viz., perceived cost, personalisation, privacy, perceived trust, perceived risk, perceived ease of use, perceived usefulness, social norms, perceived behavioural control, attitude and adoption intention. Where attitude was dependent on the drives of m-Commerce application (perceived cost, personalisation, privacy, perceived trust, perceived risk, perceived ease of use, perceived usefulness, social norms, perceived behavioural control) and adoption intention was dependent on the attitude of m-commerce users. The results of measurement and structural model are given below:

SEM was created using the Analysis of Moment Structures [AMOS] software, and the research study involved a two-stage analysis: first, the measurement model was analysed, and then the hypothesis was tested by fitting it into the structural model. The Cronbach alpha coefficient was used to determine the model's reliability, as well as the validity of the conceptualized study model.

Confirmatory Factor Analysis was used in this study to look at the constructs' convergent, construct and discriminant validity (CFA). The CR values of all the constructs were found to be more than 0.70, which confirms reliability of the construct (Hair et al., 2010)⁸. Convergent validity assesses how well a construct converges in its indicators by accounting for the variance in the statements. Convergent validity was proven in the study since the CR values were more than the AVE (Hair et al., 2010)⁸. From table 6.80, it was determined that the CR value of the construct was greater than the AVE values, implying that the model under studyhad Convergent validity.

In order to get an appropriate AVE (0.50 or greater), the mean of the squared loading for all indicators associated with a concept must explain more than half of the variance in its statements (Sarstedt, et al., 2014)⁹. For table number 6.80, it was seen that the AVE value of all the 11 constructs were more than 0.50, hence the convergent validity is established (Hair et al., 2010⁸; Sarstedt, et al., 2014⁹). As constructs were found having good factor loading, convergent validity, composite reliability and Cronbach alpha, discriminant validity of the constructs was tested.

Construct validity was checked as a pre requirement for application of the SEM. The construct validity is said to be establish when Average Shared Variance (ASV) is less than AVE (Badgaiyan, Verma and Dixit,2016)¹⁰ From table number 6.26, it is found that ASV value of the construct is less than AVE values. Hence, construct validity is said to be established.

Discriminant validity determines how different a construct is from other constructs in the path model, both in terms of how it relates to other constructs and how unique the indicators are when they only show this one construct. Discriminant validity can be proved through MSV and Fornell & Larcker (1981)¹¹ criterion. In first way the discriminant validity is establish when the value of AVE is less than the value of Maximum Shared Variance (MSV) (Hair et al.,2010)⁸. From table number 6.81 it was examined that the MSV values of the construct were less than the AVE value and hence the discriminant validity was established.

The Fornell and Larcker (1981)¹¹ criterion can also be used to assess discriminant validity. It is the most conservative criterion for evaluating discriminant validity that is proposed. This method compares "each construct's AVE Value with the Squared Inter-Construct Correlation which is a measure of the shared variance of that construct with all other constructs in the SEM. A construct should not exhibit shared variance with any other construct that is greater than its AVE value." If the said condition is satisfied the discriminant validity is said to be establish (Fornell & Larcker, 1981)¹¹. From the table number 6.27 it is examined that all the correlation value were lesser than the square root of AVE and hence the discriminant validity is established.

Table Number 6.26: Factor Loading, Convergent Validity, Composite Reliability, Discriminant, Construct Validity and Cronbach Alpha

Selected Constructs	Selected Statements	Factor Loading	AVE	Composite Reliability	Cronbach Alpha	MSV	ASV
Perceived cost	PC1	0.827	0.542	0.891	0.883	0.022	0.007
	PC2	0.786					
	PC3	0.686	_				
	PC4	0.764					
	PC5	0.606					
	PC6	0.723					
	PC7	0.735					
Personalisation	PERS1	0.894	0.713	0.925	0.920	0.026	0.005
	PERS2	0.888					
	PERS3	0.673					
	PERS4	0.891					
	PERS5	0.853					
Privacy	PRY1	0.599	0.542	0.701	0.728	0.026	0.008
-	PRY3	0.854					
Perceived Trust	TR1	0.910	0.818	0.973	0.972	0.239	0.026
	TR2	0.886					
	TR3	0.890					
	TR4	0.893					
	TR5	0.912					
	TR6	0.914					
	TR7	0.902					
	TR8	0.921					
Perceived Risk	RISK1	0.528	0.553	0.892	0.883	0.012	0.003
	RISK2	0.844					
	RISK3	0.930					
	RISK4	0.864					
	RISK5	0.579					
	RISK6	0.815					
	RISK7	0.544					
Perceived Ease	EOU1	0.735	0.662	0.907	0.905	0.239	0.031
of Use	EOU2	0.794					
	EOU3	0.892					
	EOU4	0.883					
	EOU5	0.751					

Selected Constructs	Selected Statements	Factor Loading	AVE	Composite Reliability	Cronbach Alpha	MSV	ASV
Perceived Usefulness	PU1	0.776	0.680	0.893	0.879	0.007	0.002
	PU2	0.689					
	PU3	0.873					
	PU4	0.940					
Social Norms	SN1	0.817	0.538	0.822	0.821	0.278	0.030
	SN2	0.700					
	SN3	0.760					
	SN4	0.646					
Perceived	BC1	0.782	0.688	0.898	0.897	0.278	0.030
Behavioural Control	BC2	0.862					
	BC3	0.859					
	BC4	0.809					
Attitude	ATT1	0.868	0.736	0.962	0.960	0.278	0.105
	ATT2	0.850					
	ATT3	0.861					
	ATT4	0.899					
	ATT5	0.836					
	ATT6	0.799					
	ATT 7	0.845					
	ATT 8	0.900					
	ATT9	0.863					
Adoption Intention	AD1	0.610	0.642	0.898	0.895	0.312	0.104
	AD2	0.877					
	AD3	0.854					
	AD4	0.862					
	AD5	0.776					

Table 6.26 demonstrate the construct, respective number of statements of the construct, factor loading of the statements, AVE, Composite Reliability, Cronbach Alpha, MSV, ASV values of the 11 constructs under study. The table demonstrates the good factor loading of the 60 statements under the study which range from 0.599 to 0.940.

Average Variance Extracted (AVE) values were also more than 0.50 and the Composite reliability (CR) values were more than the AVE showing the good internal consistency of the statements within the construct. Thus, the model had convergent, discriminant and construct validity. The construct's Cronbach alpha ranged from 0. 728 to 0.972, indicating that the scale was appropriate and acceptable for the research study because it above the threshold of 0.7. (Nunnally, 1978)¹².

Table Number: 6.27: Findings of AVE Values and Fornell–Larcker Test of Discriminant Validity

Selected Constructs	PC	PERS	PRY	TR	RISK	EOU	SN	PU	ВС	ATT	AI
Perceived Control (PC)	0.736										
Personalisation (PERS)	0.009	0.844									
Privacy (PRY)	0.149	0.161	0.736								
Perceived Trust (TR)	0.053	0.003	0.004	0.904							
Perceived Risk (RISK)	0.059	0.019	0.051	0.032	0.743						
Perceived Ease of Use (EOU)	0.028	0.063	0.094	0.489	0.017	0.810					
Social Norms (SN)	0.008	0.069	0.055	0.080	0.021	0.036	0.733				
Perceived Usefulness (PU)	0.033	0.026	0.017	0.084	0.683	0.019	0.023	0.824			
Perceived Behavioural Control (BC)	0.061	0.055	0.048	0.007	0.037	0.059	0.527	0.048	0.829		
Attitude (ATT)	0.131	0.068	0.085	0.050	0.110	0.179	0.035	0.072	0.043	0.857	
Adoption Intention (AI)	0.148	0.044	0.069	0.044	0.109	0.157	0.005	0.064	0.033	0.800	0.801

Note: The square root of the AVE is represented by diagonals, whereas the correlations are represented by off-diagonals.

The goodness of fit of the overall confirmatory analysis was also examined through CMIN, GFI, NFI, IFI and RMSEA. Table number 6.27 provide details of the value and the threshold of the values to pass the goodness of fit index (Bollen, 1989¹³; Greenspoon & Saklofske, 1998¹⁴; Forza & Filippini, 1998¹⁵; Hair et al., 1998¹⁶, 2010¹⁷; Awang 2012¹⁹). From the table number 6.28, it is examined that the value meets the threshold limit and thus the model of the study as concluded to have good goodness of fit and it can be concluded that the data fits into the model.

Table Number 6.28: Goodness of fit Index

Name of Index	Level of Acceptance	Index	Comments
CMIN (Chi-square or	$(\chi 2/df)$ < 5.0 (Hair et al., 2006 ¹⁸ ; Awang	Value 4.45	Threshold level is
Minimum Discrepancy Chi-square)	2012 ¹⁹)		achieved
GFI (Goodness of Fit	GFI>=0.9 (Awang,2012 ¹⁹ , Hair et.al 2010 ¹⁷)	0.858	Threshold level is
Index)	0.8 <gfi<0.9 &="" (greenspoon="" saklofske,<="" td=""><td></td><td>achieved</td></gfi<0.9>		achieved
	1998 ¹⁴ ; Forza & Filippini, 1998 ¹⁵)		
NFI (Normed-Fit Index)	NFI>=0.9 (Awang,2012) ¹⁹	0.902	Threshold level is
			achieved
CFI (Comparative Fit	CFI>=0.9 (Hu and Buntler, 1999 ²⁰ ;	0.922	Threshold level is
Index)	Awang,2012 ¹⁹ ; Hair et al, 2010 ¹⁷)		achieved
IFI (Incremental Fit	IFI>0.9; Can exceed 1 (Bollen,1989)	0.922	Threshold level is
Index)			achieved
RMSEA (Root Mean	RMSEA<0.08 (Byrne, 1998 ²¹ ; Awang, 2012 ¹⁹)	0.048	Threshold level is
Square Error of			achieved
Approximation)			

Coefficient of determination help in understanding the predictability of the dependent variable based on the independent variable under the study. Coefficient of determination (R²) for the attitude was 0.54 and for the Adoption Intention was 0.97. The above value helps to interpret that 54 percent of variance in the attitude can be predicted through the drivers of m-Commerce namely, perceived cost, personalisation, perceived risk, privacy, perceived trust, perceived usefulness, perceived ease of use, social norms and perceived behavioural control can be explained by attitude; and 97 percent of the variance in the adoption intention of m-Commerce application can be predicted with the help of attitude and the drivers of m-Commerce.

6.4.1 Evaluation of Structural Equation Model

Rectangular figures in the diagram below reflect statements that respondents were asked to complete in order to collect primary data. The eleven various constructs that were used in the research study are represented by the oval shape. The relationship between the selected statements and the construct is determined by arrows from and to the statement the construct. The numbers on the arrows from construct to statements reflect the statements' factor loading, which is reported in table number 6.29. The numbers on the arrows between constructs represent the standardised beta coefficient (path coefficient), which is also displayed in table number 6. 29. For each unit of change in the independent variables, the path coefficient defines the degree of change in the outcome of the dependent variables. The path coefficient values are standardised on a range from-1 to +1, coefficient near to +1 indicates strong positive relationships while coefficient closer to -1 indicate strong negative relationships (Sarstedt et al., 2014)⁸. Numbers in oval shapes reflect coefficient of determination (R2) which shows the fraction of the variation in the dependent variable which is predictable from the independent variable and measures SEM's predictive accuracy. Predictive accuracy was measured using the R2 statistic, which varied from zero to one. An R2 score of 0.75 is regarded as significant. Moderate and weak SEM predictors: 0.50 for moderate and 0.25 for weak (Hair, Ringle &Sarstedt, 2011²⁰; Henseler Ringle and Sinkovics, 2009²³).

TR1 RISK1 RISK3 RISK4 RISK5 RISK6 RISK7 RISK2 TR2 0.884 TR3 erceive Risk TR4 PC1 - 0.827 Perceived TR5 PC2 Perceived 0.318** TR6 PC3 TR7 PC4 D.188** ATT1 TR8 PC5 ATT2 0.039* PC6 ATT3 PC7 ATT4 AD1 PERS1 -0.894 ATT5 Adoption Intention 0.888 (Personalization 0.057* 0.849** AD2 0.877 PERS2 Attitude 0.54 AD3 PERS3 ATT6 0.845 AD4 PERS4 ATT7 AD5 PERS5 0.089* ATT8 PRY1 <0.599 Privacy ATT9 0.193** PRY2 0.039 0.017 0.136* EOU1 EOU2 Perceived Ease of Use EOU3 EOU4 6. BC1 EOU5 Perceived Behavioural BC2 PU1 0.859 Social Norms Control BC3

Figure Number 6.1: **Results of Structural Equation Modelling**

SN2 Note: *Standardised Coefficient significant at 0.01 level

SN1

SN3

SN4

PU2

PU3 PU4 BC4

0.689

0.873

Perceived

Usefulness

^{**}Standardised Coefficient significant at 0.05 level

Table Number: 6.29: Findings of Regression and Hypothesis testing

Hypothesis	Testing of Hypotheses	Standardised	T	P-	Decision		
		Beta	Statistics	Value			
H1	Perceived Cost → Attitude	0.188	4.657	0.000**	Support		
H2	Personalisation → Attitude	0.057	1.971	0.048*	Support		
Н3	Privacy → Attitude	0.089	2.446	0.021*	Support		
H4	Perceived Trust → Attitude	0.039	2.600	0.017*	Support		
H5	Perceived Risk → Attitude	0.318	3.001	0.003**	Support		
Н6	Perceived Ease of use → Attitude	0.193	5.733	0.000**	Support		
H7	Perceived Usefulness → Attitude	0.136	2.563	0.018*	Support		
H8	Social Norms → Attitude	0.017	0.236	0.813	Not		
					supported		
H9	Perceived Behavioural	0.039	1.705	0.103	Not		
	Control → Attitude				supported		
H10	Attitude → Adoption intention	0.849	26.355	0.000**	Support		
Note: ** Significant at 0.01 level; * Significant at 0.05 level							

The Table number 6.29 and figure number 6.1 demonstrate positive effect of the drivers of m-Commerce on the attitude and the attitude on adoption intention. The Beta (β) value of all the 10 paths of the model were positive and majority of the path value were significant at 0.01 (4 path) and 0.05 (4 path) level except the path value of social norms and perceived behavioural control on the attitude which were found insignificant at 0.05 level of significance. Perceived risk had the highest influence (β =.318) on attitude compare to the other drivers of m-Commerce application. The next major effect was of perceived ease of use (β =.193) followed by perceived cost (0.188), perceived usefulness (β =.136), privacy (β =.089), perceived trust (β =0.039), personalisation (β =0.057), perceived behavioural control (β =0.039) and social norms(β =.017). Attitude which was build based on the m-commerce drivers had a positive and the significant effect (β =.849) on the adoption intention for the m-commerce applications.

6.4.2 Implications of the Finding of Structural Equation Modelling

Perceived risk is the greatest significant influence on a person's mindset, as per the SEM. Perceived risk, in mobile commerce environment, arises due to the insecurity regarding unauthorized access of personal and financial data (Gao and Waechter, 2017²⁴; Chin et al., 2018²⁵) by third parties which shape peoples' attitude towards adopting m-Commerce services. The cost effective and convenient m-shopping faces some risk like transaction risk, risk of impersonalisation, data storage and transmission risk, and fraudulent practices by businessman for example, phishing scams, where a fake page resembles the genuine company page is created to hack customers' personal and financial detail as well as the risk of exposure to malware, malicious software that enters into your system and track all your activities, can affect your life as well as your future intention to shop through this medium very badly. The research study has tried to find out the impact of risk on developing attitude and found that risk played a major role in m-Commerce Adoption Intention.

As it is an important driver in Adoption Intention, m-Commerce service providers should come up with some solution to avoid the risk involved with m-Commerce transaction, through proper security software, use encryption technology for your credit card, avoid using public network while doing transactions online, download applications from reliable store like Google Play Store, Windows App Store, iPhone App Store, create multi-factor authentication to avoid multiple logins from different accounts etc. can reduce the level of risk involved with m-Commerce transactions.

Virtual stores have become a convenient place to shop from the comfort of their home without the interference of a salesperson and with a user-friendly interface that help people to search and compare products from variety of choices an also helps in easy checkout with varied payment option as well as allow easy return and refund option. Perceived ease of use (using technology is free from effort) and perceived usefulness (confidence in utilising the technology) have become an important predictor in determining attitude and adoption intention of users while accepting a new technology (Davis et al.,1989)²⁶. Other researchers have looked into and confirmed this theory, such as Liu and Li (2011)²⁷, who found that perceived usefulness and perceived ease of use of technology play a part in establishing attitudes toward mobile app adoption. This view was also confirmed by Kang et al (2015)²⁸ in his study on adoption of mobile app by revealing that the usefulness of content and the ability to use free of effort have helped them in developing positive attitude towards adopting it. The importance of these two constructs in developing attitude was also confirmed in the initial adoption stage by Hubert (2017)²⁹. According to Bhattacharjee (2011)³⁰, the importance of perceived usefulness and simplicity/ease of use in forming attitudes in the later stages of adoption is determined by the individual's actual experience with the technology. The research study has included perceived ease of use as well as perceived usefulness to study the impact on consumers' attitude towards m-Commerce transaction and found that both have significant impact on adoption intention. The results of SEM showed that perceived ease of use play more important role in adoption intention decision than perceived usefulness.

Perceived Cost was considered as an important factor in deciding the intention to adopt m-Commerce (Hong et al., 2008³¹; Li et al. 2007³²) and may slowdown the production process if consumers think that m-Commerce services are costly (Wei et al.2009)³³. Shifting from e-commerce to m-Commerce involve different expenditure and it covers handset cost, subscription, maintenance, roaming and upgrade cost which makes m-Commerce transaction more costly (Wu et al., 2014)³⁴. Some studies revealed the negative role of perceived cost in Adoption Intention (Wu and Wang, 2005)³⁵. Here the research study performed to find the impact of perceived cost on attitude and found that it affects the Adoption Intention significantly.

With continuously evolving market system, if one wants to stay sustainable in e-commerce and m-Commerce system, then developing trust among consumers play an important role. This study has incorporated trust to know its influence in developing attitude and found that trust affect attitude but the influence was not strong when compared to risk and privacy aspect is concerned.

If a company wants to live sustainably in the market place it is very important to use trust seals and signal like Transport Layer Security (TLS) certificates or Secure Sockets Layer (SSL), a networking protocol that ensures browser authentication and encrypts and secure the communication with the client and makes it more authenticated. Trust seal ensures that there is secure connection between browser and web server which guard consumers against network eavesdropping, nowadays more and more companies are adopting safety and security measures which has helped to enhance consumer trust in the system, that can be the reason for showing that even though trust affects attitude, it is not the most important drivers while involving with m-Commerce adoption intention.

Privacy, especially information privacy, is an important concern in developing nation (Sultan et al. 2009)³⁶ as marketers are collecting personal and location-based information which affect the Adoption Intention of mobile based services (Shankar and Balasubramanian,2009)³⁷. Okazaki and Mendez (2013)³⁸ have found the moderating role of privacy in Adoption Intention and Langendoerfer (2002)³⁹ suggested that privacy issue act as an inhibitor in adopting m-Commerce services as privacy issue is more prevalent in m-Commerce than e-commerce as in the former it is easy to track consumers' information through Global Positioning System embedded in mobile phones (Zhang et al., 2013)² which may lead to negative attitude towards adopting m-Commerce services (Thakur and Srivastava,2013)⁴⁰ and also may force the consumes to shift from m-Commerce to e-commerce (Chen et al., 2008)⁴¹ by neglecting the ubiquity feature of m-Commerce (Yang and Wu, 2009)⁴². Based on these studies, the research study has tried to analyse the impact of privacy in developing consumers' attitude and found that privacy play a significant role in developing attitude towards m-Commerce adoption.

With advancement in technology used in mobile applications help companies to filter consumer details to know their product /service preferences and also provide customers' a chance to co-create personalised experience with the retailer. McLean et al. (2020)⁵ found that customizing or personalizing the product and services helps in developing positive attitude in the initial phase of adoption intention and because of the experience developed over time due to continued usage personalisation help them to develop more stronger attitude towards adoption intention. the research study has tried to find the role of personalisation in developing attitude towards adopting m-Commerce services and found that personalisation influence in developing attitude towards m-Commerce, but not very strongly. This may due to the fact that to give personalised offers companies are tracking customers personal and financial information which create insecurity in the mind of consumers' while adopting m-Commerce.

Subjective norms which imply consumer's perception regarding the expectation of others to use m-Commerce services were found to be significant influence in the initial adoption intention (Venkatesh and David, 2000⁴³; Yang, 2013⁴⁴). By extending these two studies McLean et al. (2020)⁵ has tried to find the role of social norms in developing attitude and results supported the views of Venkatesh et al. (2012)⁴⁵ which states that subjective/social norms influence major role in developing attitude in the initial stage of adoption of services, but later consumers' experience play a significant role with regard to continuing with m-Commerce services.

The results of SEM in this study revealed that social norms did not play any significant role in developing consumers' attitude towards mobile commerce, may be due to the knowledge secured by consumers through the exposure to vast amount of information regarding products as well as services, knowingly or unknowingly consumers' have developed attitude based on his or her own gut/inner feelings and did not want to change their perception based on othersopinion.

Perceived behavioural control, which relates to a person's conviction that he/she has the necessary resources and control over his/her own actions, was also included in the studies related to Adoption Intention of technology. To know the impact of perceived behavioural control in developing attitude of users in adopting m-Commerce was studied and found no significant role in developing their attitude towards adopting it.

Theory of Reasoned Actions states that behaviour of human being in preceded by his/ her intention to adopt a service and is formed based on attitude. Many studies have found positive influence of attitude in adoption intention (Taylor and Todd, 1995⁴⁶; Sharma and Crossler, 2014⁴⁷). The research study has also tried to study the impact of attitude on adoption intention. The results of SEM revealed that there is significant impact of attitude on adoption intention. In this study, from the coefficient of determination, it can be found that 54 percent variance in the independent variables, viz., perceived cost, personalisation, Perceived risk, privacy, perceived trust, perceived usefulness, perceived ease of use, social norms and perceived behavioural control can be explained by attitude. Attitude explains 97 percent of variance in adoption intention.

As the finding of SEM has revealed the significant predictors involved with m-Commerce adoption, m-Commerce service providers as well as merchants should take proper steps to overcome those hurdles involved and ensure better adoption of m-Commerce services.

6.5: Key Findings of the Research Study

Because the data collected through the questionnaire was not normal, Kendall's Tau was used to determine the relationship between the selected variables, namely perceived cost, personalisation, privacy, perceived trust, perceived risk, perceived ease of use, perceived usefulness, social norms, and perceived behavioural control on attitude. The correlation between these variables was found to be significant, except for perceived behavioural control, which was found to be insignificant. The study also attempted to establish a link between m-Commerce drivers and attitudes, as well as the intention to use m-Commerce applications.

The Chi square test was used to investigate the association between selected demographic variables such as age, gender, income, occupation, family type, and marital status, and selected m-commerce drivers such as perceived cost, personalisation, privacy, perceived trust, perceived risk, perceived ease of use, perceived usefulness, social norms, and perceived behavioural control, as well as with attitude and adoption intention for m-Commerce applications.

Age was found to be significantly associated withcost involved in m-commerce, married people have adopted m-commerce more than their counterpart and users from different occupational background differ in their opinion that m-Commerce applicationshelp in saving their money and income level also affect the adoption decision. Regarding the personalisation of m-Commerce transaction, users of different age group have different opinion regarding the willingness to share information about preferred products with m-Commerce vendors. In case of marital status, people differ in their views regarding receiving promotional messages and coupons of their preferred choice, they are willing to share the information regarding the same. Peoplefrom different occupational background want to have the choice to register for mobile advertisement and have shown willingness to share preferred product information with m-Commerce vendors.

Age and marital status were found to be associated with privacy related aspects of m-Commerce adoption. Irrespective of gender, income and type of family, users consider sharing location-based information as an invasion to their privacy. Different age groups have developed different level of trust and commitment with regard to m-Commerce transactions. Male and female differ in their views regarding the efficiency of m-Commerce vendors in serving the customers as well as their views about online stores that display assurance seals are trust worthier. Marital status and occupational background also influenced their views regarding confidence level during online purchase and the opinion that m-Commerce vendors are committed towards serving the consumers' as married people are showing high level of confidence and commitment towards m-Commerce transaction.

Irrespective of their age, gender, marital status, type of family, occupation and income, users have similar opinion regarding the risk aspects involved with disclosing personal and payment details as well as the risk of third-party tampering information about m-commerce transaction. Regarding the perceived ease of use involved with mobile transactions, m-commerce companies should consider the age aspect when designing product and fixing prices to different age groups. Users from different occupational background have different opinion regarding the convenience involved in operating mobile phones as well as getting information about promotional offers.

Perceived usefulness helped the users of all age group in completing the task on time. Irrespective of gender, people have opined that it is easy to search and compare product and services in m-Commerce transaction. There are differences in the views of married and unmarried people regarding the usefulness of m-Commerce transaction in terms of getting latest information about product and services thereby making their life better.

Users from joint and nuclear family differs in their opinion regarding the comfortability to search and compare products and services via m-Commerce. Occupational background of users exert great influence as there was difference in the opinion of users regarding the comfortability involved with searching and comparing products or services as well as in accomplishing the task in a better way, thereby making their life better and smoother.

Even though friends and colleagues are using m-Commerce and also recommend others also to use it, m-Commerce users from different age group opined that they trust their own intuition than others advice. It was also found that irrespective of occupational background, majority of friends and relatives have used m-Commerce. There is difference in the views of users from different occupational background regarding the perceived behavioural control involved in m-Commerce transaction.

Different age groups have shown difference regarding their attitude towards m-commerce transaction and opined that they do online scanning before making purchased decision. The association of attitude with occupation revealed significant result with criteria regarding their satisfaction level during m-Commerce transaction. Users opined that hassle free shopping through smartphone influences m-Commerce adoption and would adopt it if privacy aspect is taken care of. Users having different income level opined that recent laws help in reducing the risk involved with m-commerce transaction. The results also revealed that user friendliness of m-Commerce App or Website interface, hassle free shopping through smart phone and positive attitude of society towards m-Commerce influence the adoption intention.

The Kruskal-Wallis test was conducted to determine whether there was a change in perception, attitude, and adoption intention for m-Commerce drivers based on where they live. Significant difference was examined between the people based on different city for nearly all the 11 variables under study except the perceived risk where the difference was not found significant at 0.05 level of significance. The Post Hoc Test was used to determine the variations in the mean score of mobile commerce users' opinions on several drivers of m-Commerce adoption. Regarding the cost involved in m-commerce adoption, perception of users was not found statistically significant between Surat and Rajkot cities, whereas it was found significant among other cities. The group that has significant difference in the opinion regarding personalisation is the m-Commerce users of Vadodara city, as the difference was significant among the group and Vadodara city. In the cities of Ahmedabad, Surat, and Rajkot, there is no substantial difference in consumer perceptions of service personalisation. The users of Vadodara city were highly concerned about privacy involved with m-Commerce transaction as they had statistically significant difference was not statistically significant.

Regarding the perceived trust involved with m-Commerce transaction, there was no significant difference found between m-Commerce users of different cities at 0.05 percent level of significance. The major difference was identified between the Vadodara and Ahmedabad city which were significant at 0.10 level of significance.

There was considerable difference in the views of m-Commerce users in all the four cities regarding perceived ease of use of m-commerce applications as all the results were found to be statistically significant. Vadodara city uses have high regard for perceived ease of use involved with m-Commerce transactions whereas it was lowest in Rajkot city.

Regarding the perceived usefulness, Vadodara city has shown high concern for perceived usefulness involved with m-Commerce application whereas the lowest was reported from Ahmedabad city. There was no significant different in the perception of users between Surat and Rajkot as the results was not statistically significant in these cities. The influence of social norms was found to be high in Vadodara whereas it was lowest in Ahmedabad city. There was no difference found in the opinion of users between Surat and Rajkot as the results were not statistically significant between these cities whereas there was considerable difference in the opinion of users in other cities.

The users of Rajkot city have high influence of perceived behavioural control regarding m-commerce applications followed by Vadodara, Ahmedabad and Surat cities respectively. There was significant difference in the views of users of Surat and Rajkot cities which were found to be statistically significant where as it was not found significant in other selected cities of Gujarat state. The Vadodara users have showed high positive attitude towards adopting m-Commerce applications and it was lowest in Rajkot city. There was no significant difference found in the attitude of users between Ahmedabad and Surat as the results were not statistically significant between these cities. Significant different in the attitude of m-commerce users were found among other cities as the results were statistically significant. The adoption intention of m-Commerce was high among Vadodara users, followed by Surat, Ahmedabad and Rajkot cities. There was significant difference in the perception of users was found between Vadodara city with Ahmedabad and Rajkot cities as the results were statistically significant whereas the difference between the other cities were not found statistically significant.

The research study has tested the model developed with the help of AMOS software. The model had 11 constructs which included drivers of m-Commerce as independent construct and attitude and adoption intention as dependent construct. The model was tested in two steps. In first stage measurement model was evaluated with the help of composite reliability, convergent and discriminant validly. Goodness of fit of the model was tested through the goodness of fix indices. When the model was passed through the preliminary requirements the relationship between the constructs were tested with the help structure equation modelling. The structural equation model revealed a positive effect and significant effect of the independent constructs on the dependent construct except the relationship between social norms and perceived behavioural control (Table number 6.29 and figure number 6.1). The R² of attitude was 0.54 and for adoption intention was 0.97 which demonstrate the good predictability of the model under study.

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