CHAPTER IV
DATA ANALYSIS AND INTERPRETATION

4.1 INTRODUCTION
Analysis and Interpretation are central steps in the research process. The aim of the analysis is to organize, classify and summarize the collected data so that they can be better comprehended and interpreted to give answers to the questions that triggered the research. Interpretation is the search for the broader meaning of findings. Analysis is not fulfilled without interpretation; and interpretation cannot proceed without analysis. So, both are inter dependent.

In this chapter a detailed analysis of the collected data has been attempted as per the objectives stated earlier. Hypotheses were also tested based on the findings of the study, interpretations and conclusions were drawn. In this chapter the following statistical techniques for the analysis of the data gathered for the present study viz., Descriptive analysis and Inferential statistics etc.

4.2 DESCRIPTIVE ANALYSIS ON CONSUMERS
Percentage analysis is one of the statistical measures used to describe the characteristics of the sample. Percentage analysis involves computing measures of variables selected of the study and its finding will give easy interpretation for the reader.

Age Group of the respondents
The online marketing penetration level and awareness levels of e-shoppers can be analysed through age of the respondents. In this study, four grouping has been done namely, Upto 30 years, 31-40 years, 41-50 years and above 50 years. The following frequency distribution expresses the distribution of the sample according to age.
Table 4.2.1 Frequency Distribution of Age Group of the respondents in years

<table>
<thead>
<tr>
<th>Age Group in years</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upto 30</td>
<td>192</td>
<td>36.9</td>
</tr>
<tr>
<td>31-40</td>
<td>196</td>
<td>37.8</td>
</tr>
<tr>
<td>41-50</td>
<td>85</td>
<td>16.3</td>
</tr>
<tr>
<td>Above 50</td>
<td>47</td>
<td>9.0</td>
</tr>
<tr>
<td>Total</td>
<td>520</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Primary Data

Table 4.2.1 shows that 36.9 percent of the respondents are in the age group of upto 30 years, while 37.8 percent belong to 31-40 years, 16.3 percent are in 41-50 years and 9 percent belong to above 50 years category. So, the percentage analysis reveals that maximum numbers of respondents who are using online shopping are in the age group of 31-40 years.

Figure 4.2.1 Frequency Distribution of Age Group of the respondents in years
Gender of the respondents

The online marketing penetration level and awareness levels of e-shoppers can be analysed through gender of the respondents. In this study, two grouping has been done namely, male and female. The following frequency distribution expresses the distribution of the sample according to gender.

Table 4.2.2 Frequency Distribution of Gender of the respondents

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>298</td>
<td>57.3</td>
</tr>
<tr>
<td>Female</td>
<td>222</td>
<td>42.7</td>
</tr>
<tr>
<td>Total</td>
<td>520</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Primary Data

Table 4.2.2 shows that 57.3 percent of the respondents are males while the remaining 42.7 percent are females. So, the percentage analysis reveals that majority of the respondents who are using online shopping are male.
Marital Status of the respondents

The online marketing penetration level and awareness levels of e-shoppers can be analysed through marital status of the respondents. In this study, two grouping has been done namely, single and married. The following frequency distribution expresses the distribution of the sample according to marital status.

**Table 4.2.3 Frequency Distribution of Marital Status of the respondents**

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>168</td>
<td>32.3</td>
</tr>
<tr>
<td>Married</td>
<td>352</td>
<td>67.7</td>
</tr>
<tr>
<td>Total</td>
<td>520</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**Source: Primary Data**

Table 4.2.3 shows that 32.3 percent of the respondents are single while the remaining 67.7 percent are married. So, the percentage analysis reveals that majority of the respondents who are using online shopping are married.

**Figure 4.2.3 Frequency Distribution of Marital Status of the respondents**
Educational Qualification of the respondents

The online marketing penetration level and awareness levels of e-shoppers can be analysed through educational qualification of the respondents. In this study, four grouping has been done namely, Schooling, Under Graduate (UG), Post Graduate (PG) and Professional. The following frequency distribution expresses the distribution of the sample according to educational qualification.

Table 4.2.4 Frequency Distribution of Educational Qualification of the respondents

<table>
<thead>
<tr>
<th>Educational Qualification</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schooling</td>
<td>51</td>
<td>9.8</td>
</tr>
<tr>
<td>UG</td>
<td>171</td>
<td>32.9</td>
</tr>
<tr>
<td>PG</td>
<td>165</td>
<td>31.7</td>
</tr>
<tr>
<td>Professional</td>
<td>133</td>
<td>25.6</td>
</tr>
<tr>
<td>Total</td>
<td>520</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Primary Data

Table 4.2.4 shows that 9.8 percent of the respondents are having Schooling qualification while 32.9 percent are UG qualified, 31.7 percent are PG qualified and the balance 25.6 percent are Professionals. So, the percentage analysis reveals that maximum numbers of respondents who are using online shopping are UG qualified.
Occupation of the respondents

The online marketing penetration level and awareness levels of e-shoppers can be analysed through occupation of the respondents. In this study, four grouping has been done namely, Salaried person, Professional, Business and Others. The following frequency distribution expresses the distribution of the sample according to occupation.

Table 4.2.5 Frequency Distribution of Occupation of the respondents

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaried Person</td>
<td>237</td>
<td>45.6</td>
</tr>
<tr>
<td>Professional</td>
<td>117</td>
<td>22.5</td>
</tr>
<tr>
<td>Business</td>
<td>90</td>
<td>17.3</td>
</tr>
<tr>
<td>Others</td>
<td>76</td>
<td>14.6</td>
</tr>
<tr>
<td>Total</td>
<td>520</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Primary Data

Table 4.2.5 shows that 45.6 percent of the respondents are Salaried persons, while 22.5 percent are Professionals, 17.3 percent are doing business and the balance 14.6 percent are Others (Pensioner, Housewife). So, the percentage analysis reveals that maximum number of respondents who are using online shopping are salaried persons.

Figure 4.2.5 Frequency Distribution of Occupation of the respondents
Monthly Income of the respondents

The online marketing penetration level and awareness levels of e-shoppers can be analysed through monthly income of the respondents. In this study, five grouping has been done namely, Upto Rs.20000, Rs.20001-30000, Rs.30001-40000, Rs.40001-50000 and above Rs.50000. The following frequency distribution expresses the distribution of the sample according to monthly income.

Table 4.2.6 Frequency Distribution of Monthly Income of the respondents

<table>
<thead>
<tr>
<th>Monthly Income (in Rs.)</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upto 20000</td>
<td>193</td>
<td>37.1</td>
</tr>
<tr>
<td>20001-30000</td>
<td>103</td>
<td>19.8</td>
</tr>
<tr>
<td>30001-40000</td>
<td>66</td>
<td>12.7</td>
</tr>
<tr>
<td>40001-50000</td>
<td>82</td>
<td>15.8</td>
</tr>
<tr>
<td>Above 50000</td>
<td>76</td>
<td>14.6</td>
</tr>
<tr>
<td>Total</td>
<td>520</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Primary Data

Table 4.2.6 shows that 37.1 percent of the respondents are having a monthly income of upto Rs.20000, while 19.8 percent have Rs.20001-30000, 12.7 percent have Rs.30001-40000, 15.8 percent have Rs.40001-50000 and the balance 14.6 percent have income above Rs.50000. So, the percentage analysis reveals that maximum number of respondents who are using online shopping have a monthly income of upto Rs.20000.
Opinion of the respondents whether Online shopping is better than traditional shopping

The online marketing penetration level and awareness levels of e-shoppers can be analysed through opinion of the respondents. In this study, two grouping has been done namely, yes and no. The following frequency distribution expresses the distribution of the sample according to opinion of the respondents whether online shopping is better than traditional shopping.

Table 4.2.7 Frequency Distribution showing whether Online shopping is better than traditional shopping

<table>
<thead>
<tr>
<th>Online shopping is better than traditional shopping</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>307</td>
<td>59.0</td>
</tr>
<tr>
<td>No</td>
<td>213</td>
<td>41.0</td>
</tr>
<tr>
<td>Total</td>
<td>520</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Primary Data

Table 4.2.7 shows that 59 percent of the respondents feel that online shopping is better than traditional shopping while the remaining 41 percent feel that traditional shopping is better. So, the percentage analysis reveals that majority of the respondents feel that online shopping is better than traditional shopping.

Figure 4.2.7 Frequency Distribution showing whether Online shopping is better than traditional shopping
Opinion of the respondents whether Physical store presence is necessary for a retailer doing online sales

The online marketing penetration level and awareness levels of e-shoppers can be analysed through opinion of the respondents. In this study, two grouping has been done namely, yes and no. The following frequency distribution expresses the distribution of the sample according to opinion of the respondents whether physical store presence is necessary for a retailer doing online sales.

Table 4.2.8 Frequency Distribution showing whether Physical store presence is necessary for a retailer doing online sales

<table>
<thead>
<tr>
<th>Physical store presence is necessary for a retailer doing online sales</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>391</td>
<td>75.2</td>
</tr>
<tr>
<td>No</td>
<td>129</td>
<td>24.8</td>
</tr>
<tr>
<td>Total</td>
<td>520</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Primary Data

Table 4.2.8 shows that 75.2 percent of the respondents feel that physical store presence is necessary for a retailer doing online sales while the remaining 24.8 percent feel that no store presence is required. So, the percentage analysis reveals that majority of the respondents feel that physical store presence is necessary for a retailer doing online sales.

Figure 4.2.8 Frequency Distribution showing whether Physical store presence is necessary for a retailer doing online sales
Opinion of the respondents regarding the Perception of the future of e-marketing
The online marketing penetration level and awareness levels of e-shoppers can be analysed through opinion of the respondents. In this study, three grouping has been done namely, E-Sales will surpass traditional sales, Traditional sales will have an upper hand and Both will co-exist in a balanced manner. The following frequency distribution expresses the distribution of the sample according to opinion of the respondents regarding the perception of the future of e-marketing

Table 4.2.9 Frequency Distribution showing the consumers’ perception of the future of e-marketing

<table>
<thead>
<tr>
<th>Perception of the future of e-marketing</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-Sales will surpass traditional sales</td>
<td>91</td>
<td>17.5</td>
</tr>
<tr>
<td>Traditional sales will have an upper hand</td>
<td>97</td>
<td>18.7</td>
</tr>
<tr>
<td>Both will co-exist in a balanced manner</td>
<td>332</td>
<td>63.8</td>
</tr>
<tr>
<td>Total</td>
<td>520</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Primary Data
Table 4.2.9 shows that 17.5 percent of the respondents feel that E-Sales will surpass traditional sales, 18.7 percent feel that traditional sales will have an upper hand and the balance 63.8 percent feel that both traditional and e-sales will co-exist in a balanced manner. So, the percentage analysis reveals that majority of the respondents feel that both traditional sales and e-sales will co-exist in a balanced manner in future.

Figure 4.2.9 Frequency Distribution showing Perception of the future of e-marketing
Table 4.2.10 Mean and SD for Points of Advantages

<table>
<thead>
<tr>
<th>Points of Advantages</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Convenience (24*7)</td>
<td>4.22</td>
<td>0.80</td>
</tr>
<tr>
<td>Time Saving</td>
<td>4.19</td>
<td>0.85</td>
</tr>
<tr>
<td>Safe &amp; Secure</td>
<td>3.24</td>
<td>0.95</td>
</tr>
<tr>
<td>Lower Prices</td>
<td>3.27</td>
<td>0.89</td>
</tr>
<tr>
<td>Elimination of boundaries</td>
<td>3.80</td>
<td>0.81</td>
</tr>
<tr>
<td>Wide Product/Service options</td>
<td>3.71</td>
<td>0.82</td>
</tr>
</tbody>
</table>

Source: Primary Data

Table 4.2.10 shows that Convenience is ranked as the most important Point of Advantage since its mean score is 4.22 while Safe and secure option is ranked as the last factor at a mean score of 3.24.

Table 4.2.11 Mean and SD for Factors Important for deciding on E-shopping

<table>
<thead>
<tr>
<th>Factors Important for deciding on E-shopping</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Best Product Pricing</td>
<td>4.42</td>
<td>0.74</td>
</tr>
<tr>
<td>Best Product Selection, Description and Information</td>
<td>4.31</td>
<td>0.77</td>
</tr>
<tr>
<td>Good Shipping Options</td>
<td>4.26</td>
<td>0.76</td>
</tr>
<tr>
<td>Trusted Website Security Certificate</td>
<td>4.50</td>
<td>0.72</td>
</tr>
<tr>
<td>Strong Customer Service Support</td>
<td>4.40</td>
<td>0.77</td>
</tr>
<tr>
<td>Reliable Return Policy Norms</td>
<td>4.29</td>
<td>0.82</td>
</tr>
<tr>
<td>Ratings given by Customers</td>
<td>4.10</td>
<td>0.80</td>
</tr>
</tbody>
</table>

Source: Primary Data

Table 4.2.11 shows that Trusted Website Security Certificate is ranked as the most important Factor for deciding on E-shopping since its mean score is 4.50 while Ratings given by customers is ranked last with a mean score of 4.10.
Table 4.2.12 Mean and SD for Factors showing Products mostly purchased Online

<table>
<thead>
<tr>
<th>Factors showing Products mostly purchased Online</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Electronics</td>
<td>3.32</td>
<td>1.10</td>
</tr>
<tr>
<td>Music &amp; Books</td>
<td>3.63</td>
<td>0.96</td>
</tr>
<tr>
<td>Travel and Entertainment</td>
<td>4.33</td>
<td>0.88</td>
</tr>
<tr>
<td>Apparels &amp; Clothing</td>
<td>3.18</td>
<td>1.15</td>
</tr>
<tr>
<td>Jewellery</td>
<td>1.83</td>
<td>1.00</td>
</tr>
<tr>
<td>Low Value Products</td>
<td>3.87</td>
<td>0.97</td>
</tr>
</tbody>
</table>

Source: Primary Data

Table 4.2.12 shows that Travel and Entertainment is ranked as the most important Product mostly purchased online since its mean score is 4.33. Jewellery is not bought online much since it is ranked last with a mean score of 1.83 proving that respondents have strong inhibitions for purchase of jewellery articles through online methods.

Table 4.2.13 Mean and SD for Factors Important for Choosing an Online retailer

<table>
<thead>
<tr>
<th>Factors Important for Choosing an Online retailer</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommendation by Friends</td>
<td>4.29</td>
<td>0.72</td>
</tr>
<tr>
<td>Advertisement in TV, Radio, Print &amp; Content Marketing</td>
<td>3.71</td>
<td>0.87</td>
</tr>
<tr>
<td>Search engine Ads</td>
<td>3.51</td>
<td>0.90</td>
</tr>
<tr>
<td>Social Networking Ads (Facebook, Blog)</td>
<td>3.57</td>
<td>0.96</td>
</tr>
<tr>
<td>Co-marketing(Partnering)</td>
<td>3.13</td>
<td>0.91</td>
</tr>
<tr>
<td>Online Advertising (Banners, Pay per Click etc)</td>
<td>3.35</td>
<td>0.89</td>
</tr>
</tbody>
</table>

Source: Primary Data

Table 4.2.13 shows that Recommendation by Friends is ranked as the most important Factor for choosing an online retailer since its mean score is 4.29 while Co-marketing (partnering) is ranked last with a mean score of 3.13.
Table 4.2.14 Mean and SD for Factors threatening website security

<table>
<thead>
<tr>
<th>Factors threatening website security</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online Debit or Credit Card Fraud</td>
<td>4.50</td>
<td>0.63</td>
</tr>
<tr>
<td>Paying for Goods but not receiving them</td>
<td>3.95</td>
<td>0.89</td>
</tr>
<tr>
<td>Phishing (Stealing Data) &amp; Hacking</td>
<td>4.15</td>
<td>0.88</td>
</tr>
<tr>
<td>Password Stealing</td>
<td>4.09</td>
<td>0.80</td>
</tr>
<tr>
<td>Misleading bogus advertisement</td>
<td>4.07</td>
<td>0.87</td>
</tr>
<tr>
<td>Wrong e-mail and contact address</td>
<td>3.78</td>
<td>1.02</td>
</tr>
</tbody>
</table>

Source: Primary Data

Table 4.2.14 shows that Online Debit or Credit Card Fraud is ranked as the most important Factor threatening website security since its mean score is 4.50 while Wrong e-mail and contact address is ranked last with a mean score of 3.78.

Table 4.2.15 Mean and SD for Factors to overcome Online threats and frauds

<table>
<thead>
<tr>
<th>Factors to overcome Online threats and frauds</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>High penalty for cyber crime</td>
<td>4.61</td>
<td>0.53</td>
</tr>
<tr>
<td>Clear cut definition of cyber laws</td>
<td>4.51</td>
<td>0.63</td>
</tr>
<tr>
<td>Creating awareness among public and online shoppers</td>
<td>4.49</td>
<td>0.64</td>
</tr>
<tr>
<td>Stringent punishments for cyber frauds</td>
<td>4.56</td>
<td>0.61</td>
</tr>
<tr>
<td>Strengthening Website Design and Features</td>
<td>4.43</td>
<td>0.66</td>
</tr>
<tr>
<td>Good Tracking Systems</td>
<td>4.51</td>
<td>0.65</td>
</tr>
</tbody>
</table>

Source: Primary Data

Table 4.2.15 shows that High penalty for cyber crime is ranked as the most important Factor to overcome Online threats and frauds since its mean score is 4.61 while Strengthening Website Design and Features is ranked last with a mean score of 4.43.

Table 4.2.16 Mean and SD for Factors on Delivery and Return Policy

<table>
<thead>
<tr>
<th>Factors on Delivery and Return Policy</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prompt Delivery Pattern</td>
<td>4.63</td>
<td>0.50</td>
</tr>
<tr>
<td>Matching Specification</td>
<td>4.45</td>
<td>0.61</td>
</tr>
<tr>
<td>Quick Solution to Complaints</td>
<td>4.54</td>
<td>0.63</td>
</tr>
<tr>
<td>24*7 Helpline</td>
<td>4.51</td>
<td>0.60</td>
</tr>
<tr>
<td>Refund of money for defectives</td>
<td>4.56</td>
<td>0.77</td>
</tr>
</tbody>
</table>

Source: Primary Data
Table 4.2.16 shows that Prompt Delivery Pattern is ranked as the most important Factor on Delivery and Return Policy since its mean score is 4.63 while Matching Specification is ranked last with a mean score of 4.45.

Table 4.2.17 Mean and SD for Factors regarding Trust building measures

<table>
<thead>
<tr>
<th>Factors regarding Trust building measures</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate response to Complaints</td>
<td>4.64</td>
<td>0.61</td>
</tr>
<tr>
<td>Reduce Cyber Threats</td>
<td>4.40</td>
<td>0.70</td>
</tr>
<tr>
<td>Genuine Products and Discounts</td>
<td>4.41</td>
<td>0.73</td>
</tr>
<tr>
<td>Clear Cut Return Policy Norms</td>
<td>4.44</td>
<td>0.74</td>
</tr>
</tbody>
</table>

Source: Primary Data

Table 4.2.17 shows that Immediate response to Complaints is ranked as the most important Factor regarding Trust building measures since its mean score is 4.64 while Reduce Cyber Threats is ranked last with a mean score of 4.40.

Table 4.2.18 Mean and SD for Factors on Customer Satisfaction and Repeated Purchases

<table>
<thead>
<tr>
<th>Factors on Customer Satisfaction and Repeated Purchases</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Website design</td>
<td>4.10</td>
<td>0.70</td>
</tr>
<tr>
<td>E-products &amp; e-services standards</td>
<td>4.14</td>
<td>0.71</td>
</tr>
<tr>
<td>Overall Online Shopping Experience</td>
<td>4.07</td>
<td>0.69</td>
</tr>
<tr>
<td>Repeated Purchase Desire</td>
<td>3.76</td>
<td>0.76</td>
</tr>
<tr>
<td>Readiness to give Word of Mouth Referrals</td>
<td>3.72</td>
<td>0.73</td>
</tr>
<tr>
<td>Loyalty attitude</td>
<td>3.88</td>
<td>0.81</td>
</tr>
</tbody>
</table>

Source: Primary Data

Table 4.2.18 shows that E-products & e-services standards is ranked as the most important Factor on Customer Satisfaction and Repeated Purchases since its mean score is 4.14 while Readiness to give Word of Mouth Referrals is ranked last with a mean score of 3.72.
4.3 INFERENTIAL ANALYSIS ON CONSUMERS

Differences between two groups in the mean scores of variables are studied using Student t test and it is discussed in this section. Also Chi-square test, Correlation Analysis and Regression Analysis are used to verify the hypothesis stated in the first chapter.

HYPOTHESIS I
Null Hypothesis: There is no significant difference between male and female with respect to Factors on Consumer Purchases.

Table 4.3.1 Student t test for significant difference between male and female with respect to Factors on Consumer Purchases

<table>
<thead>
<tr>
<th>Factors on Consumer Purchases</th>
<th>Gender</th>
<th>t value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>Perception of the future of e-marketing</td>
<td>2.47</td>
<td>0.81</td>
<td>2.46</td>
</tr>
<tr>
<td>Advantages</td>
<td>23.00</td>
<td>3.45</td>
<td>21.67</td>
</tr>
<tr>
<td>Important factors for deciding on e-shopping</td>
<td>31.31</td>
<td>3.61</td>
<td>28.87</td>
</tr>
<tr>
<td>Product Selection and Quality</td>
<td>20.08</td>
<td>3.94</td>
<td>20.31</td>
</tr>
<tr>
<td>Medium to choose Online retailer</td>
<td>21.56</td>
<td>3.52</td>
<td>21.57</td>
</tr>
<tr>
<td>Website Security</td>
<td>25.19</td>
<td>3.81</td>
<td>23.68</td>
</tr>
<tr>
<td>Remedial measures to overcome Online Frauds</td>
<td>27.46</td>
<td>2.69</td>
<td>26.64</td>
</tr>
<tr>
<td>Delivery and Return Policy</td>
<td>22.96</td>
<td>1.99</td>
<td>22.35</td>
</tr>
<tr>
<td>Trust</td>
<td>18.27</td>
<td>1.88</td>
<td>17.39</td>
</tr>
<tr>
<td>Customer Satisfaction and Repeated Purchases</td>
<td>24.44</td>
<td>3.22</td>
<td>22.65</td>
</tr>
</tbody>
</table>

Source: Primary Data

Note: ** Denotes significant at 1 percent level
* Denotes significant at 5 percent level
No star denotes not significant at 5 percent level.
Since $P$ value is less than 0.01, the null hypothesis is rejected at 1 percent level of significance. Hence, concluded that there is significant difference between male and female respondents with regard to Advantages, Important factors for deciding on e-shopping, Website Security, Remedial measures to overcome Online Frauds, Delivery and Return Policy, Trust and Customer Satisfaction and Repeated Purchases. Based on Mean scores, due to the modern approach and novel ideas than female respondents, male respondents have high opinion with respect to advantages, website security, remedial measures and have more trust and satisfaction to do online shopping.

There is no significant difference between male and female respondents with regard to Perception of the future of e-marketing, Product Selection and Quality and Medium to choose Online retailer. Since $P$ value is more than 0.05, the null hypothesis is accepted at 5 percent level of significance.

**HYPOTHESIS II**

Null Hypothesis: There is no significant difference between Single and Married status with respect to Factors on Consumer Purchases.
Table 4.3.2 Student t test for significant difference between Single and Married status with respect to Factors on Consumer Purchases

<table>
<thead>
<tr>
<th>Factors on Consumer Purchases</th>
<th>Marital Status</th>
<th>t value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Single Mean</td>
<td>Married Mean</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>Perception of the future of e-marketing</td>
<td>2.40 0.85</td>
<td>2.49 0.74</td>
<td>1.195</td>
</tr>
<tr>
<td>Advantages</td>
<td>22.42 3.23</td>
<td>22.44 3.83</td>
<td>0.069</td>
</tr>
<tr>
<td>Important factors for deciding on e-shopping</td>
<td>30.30 3.78</td>
<td>30.26 4.33</td>
<td>0.123</td>
</tr>
<tr>
<td>Product Selection and Quality</td>
<td>21.26 3.55</td>
<td>19.66 3.88</td>
<td>4.503</td>
</tr>
<tr>
<td>Medium to choose Online retailer</td>
<td>22.02 3.22</td>
<td>21.35 3.41</td>
<td>2.126</td>
</tr>
<tr>
<td>Website Security</td>
<td>25.07 3.24</td>
<td>24.30 3.65</td>
<td>2.332</td>
</tr>
<tr>
<td>Remedial measures to overcome Online Frauds</td>
<td>26.40 2.85</td>
<td>27.44 2.60</td>
<td>4.115</td>
</tr>
<tr>
<td>Delivery and Return Policy</td>
<td>22.06 2.56</td>
<td>23.01 2.08</td>
<td>4.496</td>
</tr>
<tr>
<td>Trust</td>
<td>17.37 2.40</td>
<td>18.15 2.15</td>
<td>3.723</td>
</tr>
<tr>
<td>Customer Satisfaction and Repeated Purchases</td>
<td>24.07 3.22</td>
<td>23.49 3.50</td>
<td>1.785</td>
</tr>
</tbody>
</table>

Source: Primary Data

Note: ** Denotes significant at 1 percent level
* Denotes significant at 5 percent level
No star denotes not significant at 5 percent level.

Since P value is less than 0.01, the null hypothesis is rejected at 1 percent level of significance. Hence, concluded that there is significant difference between Single and Married respondents with regard to Product Selection and Quality, Remedial measures to overcome Online Frauds, Delivery and Return Policy and Trust. Based on Mean scores, single respondents have high opinion with respect to Products, website security and impose more trust than married respondents who are more cautious.

Since P value is less than 0.05, the null hypothesis is rejected at 5 percent level of significance. Hence, concluded that there is significant difference between Single and Married respondents with regard to Medium to choose Online retailer and
There is no significant difference between Single and Married respondents with regard to Perception of the future of e-marketing, Advantages, Important factors for deciding on e-shopping and Customer Satisfaction and Repeated Purchases. Since P value is more than 0.05, the null hypothesis is accepted at 5 percent level of significance. The mean score for single and married respondents is more or less same. It shows that both perceive good future for online shopping in future.

**HYPOTHESIS III**

Null Hypothesis: There is no significant difference between Age Group with respect to Factors on Consumer Purchases.

**Table 4.3.3 ANOVA for significant difference between Age Group with respect to Factors on Consumer Purchases**

<table>
<thead>
<tr>
<th>Factors on Consumer Purchases</th>
<th>Age Group in years</th>
<th>F value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perception of the future of e-marketing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.52</td>
<td>2.35</td>
<td>2.60</td>
<td>2.47</td>
</tr>
<tr>
<td>0.82</td>
<td>0.83</td>
<td>0.62</td>
<td>0.50</td>
</tr>
<tr>
<td>Advantages</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22.73</td>
<td>22.88</td>
<td>21.36</td>
<td>21.30</td>
</tr>
<tr>
<td>3.07</td>
<td>2.89</td>
<td>5.01</td>
<td>4.97</td>
</tr>
<tr>
<td>Important factors for deciding on e-shopping</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30.97</td>
<td>30.97</td>
<td>27.40</td>
<td>29.68</td>
</tr>
<tr>
<td>3.38</td>
<td>3.11</td>
<td>5.43</td>
<td>5.72</td>
</tr>
<tr>
<td>Product Selection and Quality</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21.16</td>
<td>20.28</td>
<td>19.95</td>
<td>16.15</td>
</tr>
<tr>
<td>3.45</td>
<td>3.54</td>
<td>4.00</td>
<td>3.83</td>
</tr>
<tr>
<td>Medium to choose Online retailer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22.47</td>
<td>21.58</td>
<td>20.81</td>
<td>19.17</td>
</tr>
<tr>
<td>3.00</td>
<td>2.74</td>
<td>3.85</td>
<td>4.57</td>
</tr>
<tr>
<td>Website Security</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24.61</td>
<td>25.10</td>
<td>24.31</td>
<td>22.40</td>
</tr>
<tr>
<td>3.28</td>
<td>3.11</td>
<td>3.07</td>
<td>5.69</td>
</tr>
<tr>
<td>Remedial measures to overcome Online Frauds</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26.64</td>
<td>27.67</td>
<td>26.78</td>
<td>27.26</td>
</tr>
<tr>
<td>2.57</td>
<td>2.59</td>
<td>2.47</td>
<td>3.77</td>
</tr>
<tr>
<td>Delivery and Return Policy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22.43</td>
<td>22.84</td>
<td>22.60</td>
<td>23.40</td>
</tr>
<tr>
<td>2.26</td>
<td>2.37</td>
<td>2.46</td>
<td>1.39</td>
</tr>
<tr>
<td>Trust</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17.82</td>
<td>17.66</td>
<td>18.00</td>
<td>18.98</td>
</tr>
<tr>
<td>2.20</td>
<td>2.51</td>
<td>1.94</td>
<td>1.52</td>
</tr>
<tr>
<td>Customer Satisfaction and Repeated Purchases</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24.62</td>
<td>23.90</td>
<td>22.27</td>
<td>21.45</td>
</tr>
</tbody>
</table>
Since $P$ value is less than 0.01, the null hypothesis is rejected at 1 percent level of significance. Hence, concluded that there is significant difference between Age Group of respondents with regard to Advantages, Important factors for deciding on e-shopping, Product Selection and Quality, Medium to choose Online retailer, Website Security, Remedial measures to overcome Online Frauds, Trust and Customer Satisfaction and Repeated Purchases. Based on DMRT, respondents in the age group of upto 30 years, between 31-40 years differ significantly with those aged between 41-50 years and above 50 years regarding Important factors for deciding on e-shopping, Product Selection and Quality, Medium to choose Online retailer and Customer Satisfaction and Repeated Purchases. In Website Security, respondents in the age group of upto 30 years, between 31-40 years and between 41-50 years differ significantly with those above 50 years. In Remedial measures to overcome Online Frauds, respondents aged between 31-40 years differ significantly with those aged upto 30 years and between 41-50 years while those aged above 50 years do not vary with other groups. In Trust, respondents aged above 50 years differ significantly with those aged upto 30 years, between 31-40 years and between 41-50 years.

There is significant difference between Age Group of respondents with regard to Perception of the future of e-marketing and Delivery and Return Policy. Since $P$ value is
value is less than 0.05, the null hypothesis is rejected at 5 percent level of significance. Based on DMRT, respondents in the age group of 41-50 years differ significantly with between 31-40 years while upto 30 years and above 50 years do not differ significantly with other groups. In Delivery and Return Policy respondents in the age group above 50 years differ significantly with upto 30 years and 41-50 years while those between 31-40 years do not differ significantly with other groups.

**HYPOTHESIS IV**
Null Hypothesis: There is no significant difference between Educational Qualification with respect to Factors on Consumer Purchases.

<table>
<thead>
<tr>
<th>Factors on Consumer Purchases</th>
<th>Educational Qualification</th>
<th>F value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Schooling</td>
<td>UG</td>
<td>PG</td>
</tr>
<tr>
<td>Perception of the future of e-marketing</td>
<td>2.65&lt;sup&gt;a&lt;/sup&gt; (0.69)</td>
<td>2.53&lt;sup&gt;b&lt;/sup&gt; (0.69)</td>
<td>2.49&lt;sup&gt;b&lt;/sup&gt; (0.75)</td>
</tr>
<tr>
<td>Advantages</td>
<td>20.98&lt;sup&gt;a&lt;/sup&gt; (4.61)</td>
<td>21.75&lt;sup&gt;a&lt;/sup&gt; (3.66)</td>
<td>23.01&lt;sup&gt;b&lt;/sup&gt; (3.47)</td>
</tr>
<tr>
<td>Important factors for deciding on e-shopping</td>
<td>30.02&lt;sup&gt;b&lt;/sup&gt; (4.73)</td>
<td>30.87 (4.12)</td>
<td>29.44&lt;sup&gt;a&lt;/sup&gt; (3.99)</td>
</tr>
<tr>
<td>Product Selection and Quality</td>
<td>21.12&lt;sup&gt;b&lt;/sup&gt; (4.96)</td>
<td>19.62&lt;sup&gt;a&lt;/sup&gt; (4.06)</td>
<td>20.55&lt;sup&gt;b&lt;/sup&gt; (3.19)</td>
</tr>
<tr>
<td>Medium to choose Online retailer</td>
<td>21.18 (4.57)</td>
<td>21.46 (3.55)</td>
<td>21.70 (3.31)</td>
</tr>
<tr>
<td>Website Security</td>
<td>23.67&lt;sup&gt;a&lt;/sup&gt; (4.50)</td>
<td>24.03&lt;sup&gt;a&lt;/sup&gt; (3.49)</td>
<td>24.27&lt;sup&gt;a&lt;/sup&gt; (2.95)</td>
</tr>
<tr>
<td>Remedial measures to overcome Online Frauds</td>
<td>25.67&lt;sup&gt;a&lt;/sup&gt;</td>
<td>27.38&lt;sup&gt;b&lt;/sup&gt;</td>
<td>26.69&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Source: Primary Data</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: 1. The value within bracket refers to SD
    2. ** Denotes significant at 1 percent level
    3. * Denotes significant at 5 percent level
    4. Different alphabet between Educational Qualification denotes significance at 5 percent Level using Duncan Multiple Range Test (DMRT).

Since P value is less than 0.01, the null hypothesis is rejected at 1 percent level of significance. Hence, concluded that there is significant difference between Educational Qualification of respondents with regard to Perception of the future of e-marketing, Advantages, Important factors for deciding on e-shopping, Website Security, Remedial measures to overcome Online Frauds and Delivery and Return Policy. Based on DMRT, educated UG and PG differ significantly with those Schooling and Professional qualification regarding Perception of the future of e-marketing. In Advantages, PG and Professional differ significantly with UG and Schooling. In Important factors for deciding on e-shopping, Schooling and UG differ significantly with PG and Professional respondents. In Website Security, Professional respondents differ significantly with Schooling, UG and PG respondents. In Remedial measures to overcome Online Frauds Professional respondents differ significantly with
those of UG and PG respondents who in turn differ significantly with Schooling respondents. In Delivery and Return Policy, UG respondents differ significantly with those Schooling, PG and Professional respondents.

Since P value is less than 0.05, the null hypothesis is rejected at 5 percent level of significance. Hence, concluded that there is significant difference between Educational Qualification of respondents with regard to Product Selection and Quality and Trust. Based on DMRT, Schooling, PG and Professional differ significantly with those UG regarding Product Selection and Quality. In Trust, UG differ significantly with PG while Schooling and Professional do not significantly differ with other groups.

Since P value is more than 0.05, the null hypothesis is accepted at 5 percent level of significance. There is no significant difference between Educational Qualification of respondents with regard to Medium to choose Online retailer and Customer Satisfaction and Repeated Purchases. Hence, concluded that Online shopping brings equal contentment and satisfaction among all respondents irrespective of their educational qualification.

**HYPOTHESIS V**

Null Hypothesis: There is no significant difference between Occupation with respect to Factors on Consumer Purchases.
### Table 4.3.5 ANOVA for significant difference between Occupation with respect to Factors on Consumer Purchases

<table>
<thead>
<tr>
<th>Factors on Consumer Purchases</th>
<th>Occupation</th>
<th>F value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Salaried person</td>
<td>Professional</td>
<td>Business</td>
</tr>
<tr>
<td>Perception of the future of e-marketing</td>
<td>2.40 (0.82)</td>
<td>2.46 (0.80)</td>
<td>2.54 (0.75)</td>
</tr>
<tr>
<td>Advantages</td>
<td>22.35 (4.02)</td>
<td>22.56 (3.01)</td>
<td>22.64 (3.49)</td>
</tr>
<tr>
<td>Important factors for deciding on e-shopping</td>
<td>30.27 (4.19)</td>
<td>30.39 (3.44)</td>
<td>30.54 (3.98)</td>
</tr>
<tr>
<td>Product Selection and Quality</td>
<td>20.43 (3.88) b</td>
<td>20.30 (3.64) b</td>
<td>20.46 (3.46) b</td>
</tr>
<tr>
<td>Medium to choose Online retailer</td>
<td>21.91 (3.15) b</td>
<td>21.62 (2.62) b</td>
<td>21.74 (3.59) b</td>
</tr>
<tr>
<td>Website Security</td>
<td>24.97 (3.10) b</td>
<td>24.46 (3.43) b</td>
<td>24.91 (3.20) b</td>
</tr>
<tr>
<td>Remedial measures to overcome Online Frauds</td>
<td>27.17 (2.62) ab</td>
<td>26.50 (2.69) a</td>
<td>27.40 (2.41) b</td>
</tr>
<tr>
<td>Delivery and Return Policy</td>
<td>22.70 (2.37)</td>
<td>22.49 (2.10)</td>
<td>22.58 (2.55)</td>
</tr>
<tr>
<td>Trust</td>
<td>17.86 (2.44) ab</td>
<td>17.38 (2.15) a</td>
<td>18.28 (1.91) b</td>
</tr>
<tr>
<td>Customer Satisfaction and Repeated Purchases</td>
<td>24.30 (3.45) b</td>
<td>23.50 (3.08) b</td>
<td>23.82 (3.19) b</td>
</tr>
</tbody>
</table>

**Source:** Primary Data

**Note:**
1. The value within bracket refers to SD
2. ** Denotes significant at 1 percent level
3. * Denotes significant at 5 percent level
4. Different alphabet between Occupation denotes significance at 5 percent Level using Duncan Multiple Range Test (DMRT).
Since P value is less than 0.01, the null hypothesis is rejected at 1 percent level of significance. Hence, concluded that there is significant difference between Occupation of respondents with regard to Medium to choose Online retailer, Website Security, Trust and Customer Satisfaction and Repeated Purchases. Based on DMRT, Salaried persons, Professional, Businessmen differ significantly with Others (Pensioner, Housewife) regarding Medium to choose Online retailer, Website Security and Customer Satisfaction and Repeated Purchases. In Trust, Businessmen and Others differ significantly with Professional while Salaried persons do not significantly differ with other groups.

Since P value is less than 0.05, the null hypothesis is rejected at 5 percent level of significance. Hence, concluded that there is significant difference between Occupation of respondents with regard to Product Selection and Quality and Remedial measures to overcome Online Frauds. Based on DMRT, Salaried persons, Professional, Businessmen differ significantly with Others (Pensioner, Housewife) regarding Product Selection and Quality. In Remedial measures to overcome Online Frauds, Businessmen and Others differ significantly with Professional while Salaried persons do not significantly differ with other groups.

There is no significant difference between Occupation of respondents with regard to Perception of the future of e-marketing, Advantages, Important factors for
deciding on e-shopping and Delivery and Return Policy. Since P value is more than 0.05, the null hypothesis is accepted at 5 percent level of significance. Hence, concluded that respondents pursuing various occupations feel positive about the future of e-marketing.

**HYPOTHESIS VI**
Null Hypothesis: There is no significant difference between Monthly Income with respect to Factors on Consumer Purchases.

<table>
<thead>
<tr>
<th>Factors on Consumer Purchases</th>
<th>Monthly Income (in Rs.)</th>
<th>F value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Upto 20000</td>
<td>20001-30000</td>
<td>30001-40000</td>
</tr>
<tr>
<td>Perception of the future of e-marketing</td>
<td>2.53 (0.69)</td>
<td>2.47 (0.71)</td>
<td>2.33 (0.95)</td>
</tr>
<tr>
<td>Advantages</td>
<td>21.33a (4.25)</td>
<td>21.56a (2.70)</td>
<td>24.36b (2.26)</td>
</tr>
<tr>
<td>Important factors for deciding on e-shopping</td>
<td>29.53a (4.69)</td>
<td>29.96a (3.91)</td>
<td>32.18b (2.25)</td>
</tr>
<tr>
<td>Product Selection and Quality</td>
<td>19.84 (3.94)</td>
<td>20.01 (3.91)</td>
<td>20.91 (3.53)</td>
</tr>
<tr>
<td>Medium to choose Online retailer</td>
<td>21.20ab (3.77)</td>
<td>22.03b (2.82)</td>
<td>23.15c (2.77)</td>
</tr>
<tr>
<td>Website Security</td>
<td>23.88ab (3.81)</td>
<td>23.30a (2.57)</td>
<td>26.33c (2.38)</td>
</tr>
<tr>
<td>Remedial measures to overcome Online Frauds</td>
<td>26.46a (3.05)</td>
<td>26.84a (2.62)</td>
<td>28.14b (2.13)</td>
</tr>
</tbody>
</table>
Delivery and Return Policy | 22.32<sup>a</sup> | 23.18<sup>b</sup> | 23.18<sup>b</sup> | 22.09<sup>a</sup> | 23.25<sup>b</sup> | 6.022 | <0.001**
--- | --- | --- | --- | --- | --- | --- | ---
(2.35) | (2.21) | (1.86) | (2.89) | (1.32) | | |
Trust | 17.33<sup>a</sup> | 18.36<sup>b</sup> | 18.67<sup>b</sup> | 17.40<sup>a</sup> | 18.58<sup>b</sup> | 9.359 | <0.001**
--- | --- | --- | --- | --- | --- | --- | ---
(2.54) | (1.97) | (1.44) | (2.48) | (1.63) | | |
Customer Satisfaction and Repeated Purchases | 22.69<sup>a</sup> | 24.16<sup>b</sup> | 24.33<sup>b</sup> | 24.35<sup>b</sup> | 24.24<sup>b</sup> | 6.691 | <0.001**
--- | --- | --- | --- | --- | --- | --- | ---
(3.70) | (3.65) | (2.68) | (3.18) | (2.57) | | |

**Source:** Primary Data

Note:  
1. The value within bracket refers to SD  
2. ** Denotes significant at 1 percent level  
3. * Denotes significant at 5 percent level  
4. Different alphabet between Monthly Income denotes significance at 5 percent Level using Duncan Multiple Range Test (DMRT).

Since P value is less than 0.01, the null hypothesis is rejected at 1 percent level of significance. Hence, concluded that there is significant difference between Monthly Income of respondents with regard to Advantages, Important factors for deciding on e-shopping, Medium to choose Online retailer, Website Security, Remedial measures to overcome Online Frauds, Delivery and Return Policy, Trust and Customer Satisfaction and Repeated Purchases. Based on DMRT, respondents having an income of Rs.30001-40000, Rs.40001-50000 and above Rs.50000 differ significantly with upto Rs.20000 and Rs.20001-30000 regarding Advantages, Important factors for deciding on e-shopping and Remedial measures to overcome Online Frauds. In Medium to choose Online retailer, respondents having an income of Rs.30001-40000 differ significantly with Rs.20001-30000 who in turn differ significantly with above Rs.50000 while those drawing upto Rs.20000 and between Rs.40001-50000 do not differ significantly with
other groups. In Website Security, respondents having an income of Rs.30001-40000 and above Rs.50000 differ significantly with Rs.40001-50000 who in turn differ significantly with Rs.20001-30000 while those drawing upto Rs.20000 do not differ significantly with other groups. In Delivery and Return Policy and Trust, respondents having an income of Rs.20001-30000, Rs.30001-40000 and above Rs.50000 differ significantly with Rs.40001-50000 and upto Rs.20000. in Customer Satisfaction and Repeated Purchases, respondents having an income of Rs.20001-30000, Rs.30001-40000, Rs.40001-50000 and above Rs.50000 differ significantly with upto Rs.20000.

There is no significant difference between Monthly Income of respondents with regard to Perception of the future of e-marketing and Product Selection and Quality. Since P value is more than 0.05, the null hypothesis is accepted at 5 percent level of significance. Hence, concluded that all income groups feel optimistic about the future of e-marketing.

**HYPOTHESIS VII**

Null Hypothesis: There is no association between Age Group in years and Online Shopping is better than traditional shopping.

<table>
<thead>
<tr>
<th>Age Group in years</th>
<th>Online shopping is better than traditional shopping</th>
<th>Total</th>
<th>Chi-square value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upto 30</td>
<td>128 (66.7%)</td>
<td>64 (33.3%)</td>
<td>192</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[41.7%]</td>
<td>[30.0%]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31-40</td>
<td>123 (62.8%)</td>
<td>73 (37.2%)</td>
<td>196</td>
<td>34.304</td>
</tr>
<tr>
<td></td>
<td>[40.1%]</td>
<td>[34.3%]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>41-50</td>
<td>46 (54.1%)</td>
<td>39 (45.9%)</td>
<td>85</td>
<td></td>
</tr>
</tbody>
</table>
Since P value is less than 0.01, the null hypothesis is rejected at 1 percent level of significance. Hence concluded that there is association between Age Group in years and Online Shopping is better than traditional shopping. Based on the row and column percentage, 41.7 percent respondents in the age group of upto 30 years, 40.1 percent respondents in the age group of 31-40 years, 15 percent respondents in the age group of 41-50 years and 3.2 percent respondents in the age of above 50 years feel that Online Shopping is better than traditional shopping. Youth feel more confident above the goodness of online shopping than older respondents who are little apprehensive.

HYPOTHESIS VIII

Null Hypothesis: There is no association between Educational Qualification and Physical store presence is necessary for a retailer doing online sales.

Table 4.3.8 Chi-square test for association between Educational Qualification and Physical store presence is necessary for a retailer doing online sales

<table>
<thead>
<tr>
<th>Educational Qualification</th>
<th>Physical store presence is necessary for a retailer doing online sales</th>
<th>Total</th>
<th>Chi-square value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schooling</td>
<td>37</td>
<td>14</td>
<td>51</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(72.5%)</td>
<td>(27.5%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[9.5%]</td>
<td>[10.9%]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UG</td>
<td>151</td>
<td>20</td>
<td>171</td>
<td></td>
</tr>
</tbody>
</table>
Since P value is less than 0.01, the null hypothesis is rejected at 1 percent level of significance. Hence concluded that there is association between Educational Qualification and Physical store presence is necessary for a retailer doing online sales. Based on the row and column percentage, 9.5 percent respondents who studied Schooling, 38.6 percent Under Graduates, 31.2 percent Post Graduates and 20.7 percent Professionals feel that Physical store presence is necessary for a retailer doing online sales. Qualified Youth feel that the presence of a store would be an added advantage while shopping on the internet.

<table>
<thead>
<tr>
<th></th>
<th>PG</th>
<th>Professional</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>122 (73.9%)</td>
<td>81 (60.9%)</td>
<td>391</td>
</tr>
<tr>
<td>[38.6%]</td>
<td>43 (26.1%)</td>
<td>52 (39.1%)</td>
<td>129</td>
</tr>
<tr>
<td>[15.5%]</td>
<td>[33.3%]</td>
<td>[40.3%]</td>
<td>520</td>
</tr>
<tr>
<td></td>
<td>165</td>
<td>133</td>
<td></td>
</tr>
<tr>
<td>[31.2%]</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Source: Primary Data**

Note: 1. The value within ( ) refers to Row Percentage
   2. The value within [ ] refers to Column Percentage
   3. ** Denotes significant at 1 percent level
HYPOTHESIS IX
Null Hypothesis: There is no association between Occupation and Perception of the future of e-marketing.

Table 4.3.9 Chi-square test for association between Occupation and Perception of the future of e-marketing

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Perception of the future of e-marketing</th>
<th>Total</th>
<th>Chi-square value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>E-Sales will surpass traditional sales</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salaried Person</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Traditional sales will have an upper hand</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Both will co-exist in a balanced manner</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salaried Person</td>
<td>50</td>
<td>42</td>
<td>145</td>
<td>237</td>
</tr>
<tr>
<td></td>
<td>(21.1%)</td>
<td>(17.7%)</td>
<td>(61.2%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[54.9%]</td>
<td>[43.3%]</td>
<td>[43.8%]</td>
<td></td>
</tr>
<tr>
<td>Professional</td>
<td>23</td>
<td>17</td>
<td>77</td>
<td>117</td>
</tr>
<tr>
<td></td>
<td>(19.7%)</td>
<td>(14.5%)</td>
<td>(65.8%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[25.3%]</td>
<td>[17.5%]</td>
<td>[23.2%]</td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td>14</td>
<td>13</td>
<td>63</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td>(15.6%)</td>
<td>(14.4%)</td>
<td>(70.0%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[15.4%]</td>
<td>[13.4%]</td>
<td>[18.9%]</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>4</td>
<td>25</td>
<td>47</td>
<td>76</td>
</tr>
<tr>
<td></td>
<td>(5.3%)</td>
<td>(32.9%)</td>
<td>(61.8%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[4.4%]</td>
<td>[25.8%]</td>
<td>[14.1%]</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>91</td>
<td>97</td>
<td>332</td>
<td>520</td>
</tr>
</tbody>
</table>

Source: Primary Data

Note: 1. The value within ( ) refers to Row Percentage
2. The value within [ ] refers to Column Percentage
3. ** Denotes significant at 1 percent level
Since P value is less than 0.01, the null hypothesis is rejected at 1 percent level of significance. Hence, concluded that there is association between Occupation and Perception of the future of e-marketing. Based on the row and column percentage, 43.8 percent respondents who are Salaried persons, 23.2 percent Professionals, 19.0 percent respondents pursuing Business and 14.2 percent other groups like Retired...
persons, Housewife etc feel that both traditional and e-sales will co-exist in a balanced manner.

HYPOTHESIS X
Null Hypothesis: There is no significant difference between mean ranks towards Points of Advantages.

Table 4.3.10 Friedman test for significant difference between mean ranks towards Points of Advantages

<table>
<thead>
<tr>
<th>Points of Advantages</th>
<th>Mean Rank</th>
<th>Chi-Square value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Convenience (24*7)</td>
<td>4.52</td>
<td>844.128</td>
<td>&lt;0.001**</td>
</tr>
<tr>
<td>Time Saving</td>
<td>4.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Safe &amp; Secure</td>
<td>2.51</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower Prices</td>
<td>2.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elimination of boundaries</td>
<td>3.57</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wide Product/Service options</td>
<td>3.40</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary Data
Note: ** Denotes significant at 1 percent level
Since P value is less than 0.01, the null hypothesis is rejected at 1 percent level of significance. Hence, concluded that there is significant difference between mean ranks towards Points of Advantages. Based on mean rank Convenience (4.52) is ranked first, followed by Time Saving (4.50), Elimination of boundaries (3.57), Wide Product / Service options (3.40), Safe & Secure (2.51) and Lower Prices (2.50) ranked as second, third, fourth, fifth and sixth correspondingly as Points of Advantages.

HYPOTHESIS XI
Null Hypothesis: There is no significant difference between mean ranks towards Factors Important for deciding on E-shopping.

Table 4.3.11 Friedman test for significant difference between mean ranks towards Factors Important for deciding on E-shopping

<table>
<thead>
<tr>
<th>Factors Important for deciding on E-shopping</th>
<th>Mean Rank</th>
<th>Chi-Square value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Best Product Pricing</td>
<td>4.23</td>
<td>164.937</td>
<td>&lt;0.001**</td>
</tr>
<tr>
<td>Best Product Selection, Description and Information</td>
<td>3.96</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Since P value is less than 0.01, the null hypothesis is rejected at 1 percent level of significance. Hence, concluded that there is significant difference between mean ranks towards Factors Important for deciding on E-shopping. Based on mean rank Trusted Website Security (4.48) is ranked first, followed by Strong Customer Service Support (4.25), Best Product Pricing (4.23), Best Product Selection, Description and Information (3.96), Reliable Return Policy Norms (3.95), Good Shipping Options (3.77) and Ratings given by Customers (3.37) ranked as second, third, fourth, fifth, sixth and seventh correspondingly as Factors Important for deciding on E-shopping.

**HYPOTHESIS XII**

Null Hypothesis: There is no significant difference between mean ranks towards Factors showing Products mostly purchased Online.

### Table 4.3.12 Products mostly purchased Online

<table>
<thead>
<tr>
<th>Factors showing Products mostly purchased Online</th>
<th>Mean Rank</th>
<th>Chi-Square value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Electronics</td>
<td>3.41</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Music &amp; Books</td>
<td>3.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Travel and Entertainment</td>
<td>4.93</td>
<td>1202.446</td>
<td>&lt;0.001**</td>
</tr>
<tr>
<td>Apparels &amp; Clothing</td>
<td>3.17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jewellery</td>
<td>1.52</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Value Products</td>
<td>4.20</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Source: Primary Data**

Note: ** Denotes significant at 1 percent level
Since P value is less than 0.01, the null hypothesis is rejected at 1 percent level of significance. Hence, concluded that there is significant difference between mean ranks
towards Factors showing Products mostly purchased Online. Based on mean rank, Travel and Entertainment (4.93) is ranked first, followed by Low Value Products (4.20), Music & Books (3.78), Consumer Electronics (3.41), Apparels & Clothing (3.17) and Jewellery (1.52) ranked as second, third, fourth, fifth and sixth correspondingly as Factors showing Products mostly purchased Online.

**HYPOTHESIS XIII**
Null Hypothesis: There is no significant difference between mean ranks towards Factors Important for Choosing an Online retailer.

*Table 4.3.13 Friedman test for significant difference between mean ranks towards Factors Important for Choosing an Online retailer*

<table>
<thead>
<tr>
<th>Factors Important for Choosing an Online retailer</th>
<th>Mean Rank</th>
<th>Chi-Square value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommendation by Friends</td>
<td>4.74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advertisement in TV, Radio, Print &amp; Content Marketing</td>
<td>3.73</td>
<td>581.132</td>
<td>&lt;0.001**</td>
</tr>
<tr>
<td>Search engine Ads</td>
<td>3.38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Networking Ads (Facebook, Blog)</td>
<td>3.48</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Co-marketing(Partnering)</td>
<td>2.65</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Online Advertising (Banners, Pay per Click etc)</td>
<td>3.02</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: Primary Data*

Note: ** Denotes significant at 1 percent level
Since P value is less than 0.01, the null hypothesis is rejected at 1 percent level of significance. Hence, concluded that there is significant difference between mean ranks towards Factors Important for Choosing an Online retailer. Based on mean rank, Recommendation by Friends (4.74) is ranked first, followed by Advertisement in TV, Radio, Print & Content Marketing (3.73), Social Networking Ads (Facebook, Blog) (3.48), Search engine Ads (3.38), Online Advertising (Banners, Pay per Click etc)
and Co-marketing(Partnering) (2.65) ranked as second, third, fourth, fifth and sixth correspondingly as Factors Important for Choosing an Online retailer.

**HYPOTHESIS XIV**
Null Hypothesis: There is no significant difference between mean ranks towards Factors threatening website security.

<table>
<thead>
<tr>
<th>Factors threatening website security</th>
<th>Mean Rank</th>
<th>Chi-Square value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online Debit or Credit Card Fraud</td>
<td>4.42</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paying for Goods but not receiving them</td>
<td>3.13</td>
<td>296.429</td>
<td>&lt;0.001**</td>
</tr>
<tr>
<td>Phishing (Stealing Data) &amp; Hacking</td>
<td>3.62</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Password Stealing</td>
<td>3.40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Misleading bogus advertisement</td>
<td>3.41</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wrong e-mail and contact address</td>
<td>3.02</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Source: Primary Data**
Note: ** Denotes significant at 1 percent level

Since P value is less than 0.01, the null hypothesis is rejected at 1 percent level of significance. Hence, concluded that there is significant difference between mean ranks towards Factors threatening website security. Based on mean rank, Online Debit or Credit Card Fraud (4.42) is ranked first, followed by Phishing (Stealing Data) & Hacking (3.62), Misleading bogus advertisement (3.41), Password Stealing (3.40), Paying for Goods but not receiving them (3.13) and Wrong e-mail and contact address (3.02) ranked as second, third, fourth, fifth and sixth correspondingly as Factors threatening website security.
**HYPOTHESIS XV**

Null Hypothesis: There is no significant difference between mean ranks towards Factors to overcome Online threats and frauds.

**Table 4.3.15 Friedman test for significant difference between mean ranks towards Factors to overcome Online threats and frauds**

<table>
<thead>
<tr>
<th>Factors to overcome Online threats and frauds</th>
<th>Mean Rank</th>
<th>Chi-Square value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>High penalty for cyber crime</td>
<td>3.72</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clear cut definition of cyber laws</td>
<td>3.51</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creating awareness among public and online shoppers</td>
<td>3.43</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stringent punishments for cyber frauds</td>
<td>3.64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strengthening Website Design and Features</td>
<td>3.24</td>
<td>50.643</td>
<td>&lt;0.001**</td>
</tr>
<tr>
<td>Good Tracking Systems</td>
<td>3.47</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Source: Primary Data**

Note: ** Denotes significant at 1 percent level

Since P value is less than 0.01, the null hypothesis is rejected at 1 percent level of significance. Hence, concluded that there is significant difference between mean ranks towards Factors to overcome Online threats and frauds. Based on mean rank, High penalty for cyber crime (3.72) is ranked first, followed by Stringent punishments for cyber frauds (3.64), Clear cut definition of cyber laws (3.51), Good Tracking Systems (3.47), Creating awareness among public and online shoppers (3.43) and Strengthening Website Design and Features (3.24) ranked as second, third, fourth, fifth and sixth correspondingly as Factors to overcome Online threats and frauds.

**HYPOTHESIS XVI**

Null Hypothesis: There is no significant difference between mean ranks towards Factors on Delivery and Return Policy.
Table 4.3.16 Friedman test for significant difference between mean ranks towards Factors on Delivery and Return Policy

<table>
<thead>
<tr>
<th>Factors on Delivery and Return Policy</th>
<th>Mean Rank</th>
<th>Chi-Square value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prompt Delivery Pattern</td>
<td>3.18</td>
<td>45.296</td>
<td>&lt;0.001**</td>
</tr>
<tr>
<td>Matching Specification</td>
<td>2.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quick Solution to Complaints</td>
<td>2.98</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24*7 Helpline</td>
<td>2.94</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refund of money for defectives</td>
<td>3.12</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary Data
Note: ** Denotes significant at 1 percent level

Since P value is less than 0.01, the null hypothesis is rejected at 1 percent level of significance. Hence, concluded that there is significant difference between mean ranks towards Factors on Delivery and Return Policy. Based on mean rank, Prompt Delivery Pattern (3.18) is ranked first, followed by Refund of money for defectives (3.12), Quick Solution to Complaints (2.98), 24*7 Helpline (2.94) and Matching Specification (2.78) ranked as second, third, fourth and fifth correspondingly as are ranked as Factors on Delivery and Return Policy.

HYPOTHESIS XVII
Null Hypothesis: There is no significant difference between mean ranks towards Factors regarding Trust building measures.

Table 4.3.17 Friedman test for significant difference between mean ranks towards Factors regarding Trust building measures

<table>
<thead>
<tr>
<th>Factors regarding Trust building measures</th>
<th>Mean Rank</th>
<th>Chi-Square value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate response to Complaints</td>
<td>2.79</td>
<td>96.849</td>
<td>&lt;0.001**</td>
</tr>
<tr>
<td>Reduce Cyber Threats</td>
<td>2.38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Genuine Products and Discounts</td>
<td>2.39</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clear Cut Return Policy Norms</td>
<td>2.44</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary Data
Note: ** Denotes significant at 1 percent level
Since P value is less than 0.01, the null hypothesis is rejected at 1 percent level of significance. Hence, concluded that there is significant difference between mean ranks towards Factors regarding Trust building measures. Based on mean rank, Immediate response to Complaints (2.79) is ranked first, followed by Clear Cut Return Policy Norms (2.44), Genuine Products and Discounts (2.39) and Reduce Cyber Threats (2.38) ranked as second, third and fourth correspondingly as Factors regarding Trust building measures.

**HYPOTHESIS XVIII**

Null Hypothesis: There is no significant difference between mean ranks towards Factors on Customer Satisfaction and Repeated Purchases.

<table>
<thead>
<tr>
<th>Factors on Customer Satisfaction and Repeated Purchases</th>
<th>Mean Rank</th>
<th>Chi-Square value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Website design</td>
<td>3.88</td>
<td>270.990</td>
<td>&lt;0.001**</td>
</tr>
<tr>
<td>E-products &amp; e-services standards</td>
<td>3.94</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Online Shopping Experience</td>
<td>3.81</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repeated Purchase Desire</td>
<td>3.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Readiness to give Word of Mouth Referrals</td>
<td>2.95</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loyalty attitude</td>
<td>3.34</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Source: Primary Data**

Note: ** Denotes significant at 1 percent level
Since P value is less than 0.01, the null hypothesis is rejected at 1 percent level of significance. Hence, concluded that there is significant difference between mean ranks towards Factors on Customer Satisfaction and Repeated Purchases. Based on mean rank, E-products & e-services standards (3.94) is ranked first, followed by Website design (3.88), Overall Online Shopping Experience (3.81), Loyalty attitude (3.34), Repeated Purchase Desire (3.09) and Readiness to give Word of Mouth Referrals (2.95)
ranked as second, third, fourth, fifth and sixth correspondingly as Factors on Customer Satisfaction and Repeated Purchases.

Table 4.3.19 Pearson Correlation Coefficient between Factors on Consumer Purchases

<table>
<thead>
<tr>
<th>Factors of Consumer Purchases</th>
<th>Advantages</th>
<th>Product Selection and Quality</th>
<th>Website Security</th>
<th>Delivery and Return Policy</th>
<th>Trust</th>
<th>Customer Satisfaction and Repeated Purchases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advantages</td>
<td>1.000</td>
<td></td>
<td>0.334**</td>
<td>0.179**</td>
<td>0.231**</td>
<td>0.358**</td>
</tr>
<tr>
<td>Product Selection and Quality</td>
<td>-</td>
<td>1.000</td>
<td>0.206**</td>
<td>0.002</td>
<td>0.014</td>
<td>0.408**</td>
</tr>
<tr>
<td>Website Security</td>
<td>-</td>
<td>-</td>
<td>1.000</td>
<td>0.163**</td>
<td>0.243**</td>
<td>0.203**</td>
</tr>
<tr>
<td>Delivery and Return Policy</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1.000</td>
<td>0.691**</td>
<td>0.411**</td>
</tr>
<tr>
<td>Trust</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1.000</td>
<td>0.406**</td>
</tr>
<tr>
<td>Customer Satisfaction and Repeated Purchases</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Source: Primary Data

Note: ** Correlation is significant at 1 percent level
No star denotes correlation not significant at 5 percent level.

The Correlation Coefficient between Advantages and Customer Satisfaction and Repeated Purchases is 0.358 which indicate 36 percentage positive relationship between Advantages and Customer Satisfaction and Repeated Purchases and is significant at 1 percent level.

The Correlation Coefficient between Product Selection and Customer Satisfaction and Repeated Purchases is 0.408 which indicate 41 percentage positive
relationship between Product Selection and Customer Satisfaction and Repeated Purchases and is significant at 1 percent level. The Correlation Coefficient between Website Security and Trust is 0.243 which indicate 24 percentage positive relationship between Website Security and Trust and is significant at 1 percent level. The Correlation Coefficient between Delivery and Return Policy and Trust is 0.691 which indicate 69 percentage positive relationship between Delivery and Return Policy and Trust and is significant at 1 percent level. The Correlation Coefficient between Trust and Customer Satisfaction and Repeated Purchases is 0.406 which indicate 41 percentage positive relationship between Trust and Customer Satisfaction and Repeated Purchases and is significant at 1 percent level.

REGRESSION ANALYSIS OF CUSTOMER SATISFACTION AND REPEATED PURCHASES ON FACTORS ON CONSUMER PURCHASES

Regression is the determination of statistical relationship between two or more variables. In simple regression two variables are used. One variable (independent) is the cause of the behaviour of another one (dependent). When there are more than two independent variables the analysis concerning relationship is known as multiple correlations and the equation describing such relationship is called as the multiple regression equation. Regression analysis is concerned with the derivation of an appropriate mathematical expression is derived for finding values of a dependent variable on the basis of independent variable. It is thus designed to examine the relationship of a variable $Y$ to a set of other variables $X_1, X_2, X_3 \ldots \ldots X_n$. The most commonly used linear equation in

$$Y = b_1 X_1 + b_2 X_2 + \ldots \ldots + b_n X_n + b_0.$$
Here Y is the dependent variable, which is to be found. X₁, X₂,… and Xₙ are the known variables with which predictions are to be made and b₁, b₂,…,bₙ are coefficient of the variables.

In this study, the dependent variable is Customer Satisfaction and Repeated Purchases. Independent variables are Advantages, Important factors for deciding on e-shopping, Product Selection and Quality, Medium to choose Online retailer, Website Security, Remedial measures to overcome Online Frauds, Delivery and Return Policy and Trust. They are discussed as follows:

Dependent variable : Customer Satisfaction and Repeated Purchases (Y)
Independent variables :
1. Advantages (X₁)
2. Important factors for deciding on e-shopping (X₂)
3. Product Selection and Quality (X₃)
4. Medium to choose Online retailer (X₄)
5. Website Security (X₅)
6. Remedial measures to overcome Online Frauds (X₆)
7. Delivery and Return Policy (X₇)
8. Trust (X₈)

Multiple R value : 0.635
R Square value : 0.403
F value : 43.109
P value : <0.001**
Table 4.3.20 Variables in the Multiple Regression Analysis

<table>
<thead>
<tr>
<th>Variables</th>
<th>Unstandardized co-efficient (B)</th>
<th>SE of B</th>
<th>Standardized co-efficient (β)</th>
<th>t value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1</td>
<td>0.122</td>
<td>0.039</td>
<td>0.130</td>
<td>3.108</td>
<td>0.002**</td>
</tr>
<tr>
<td>X2</td>
<td>0.073</td>
<td>0.040</td>
<td>0.089</td>
<td>1.811</td>
<td>0.071</td>
</tr>
<tr>
<td>X3</td>
<td>0.301</td>
<td>0.033</td>
<td>0.338</td>
<td>8.992</td>
<td>&lt;0.001**</td>
</tr>
<tr>
<td>X4</td>
<td>0.083</td>
<td>0.040</td>
<td>0.081</td>
<td>2.075</td>
<td>0.039*</td>
</tr>
<tr>
<td>X5</td>
<td>0.011</td>
<td>0.041</td>
<td>0.011</td>
<td>0.269</td>
<td>0.788</td>
</tr>
<tr>
<td>X6</td>
<td>0.140</td>
<td>0.058</td>
<td>0.115</td>
<td>2.418</td>
<td>0.016*</td>
</tr>
<tr>
<td>X7</td>
<td>0.363</td>
<td>0.073</td>
<td>0.242</td>
<td>4.980</td>
<td>&lt;0.001**</td>
</tr>
<tr>
<td>X8</td>
<td>0.320</td>
<td>0.075</td>
<td>0.211</td>
<td>4.233</td>
<td>&lt;0.001**</td>
</tr>
<tr>
<td>Constant</td>
<td>0.992</td>
<td>1.562</td>
<td>-</td>
<td>0.635</td>
<td>0.526</td>
</tr>
</tbody>
</table>

Source: Primary Data

The multiple correlation coefficient is 0.635 measures the degree of relationship between the actual values and the predicted values of Customer Satisfaction and Repeated Purchases. Because the predicted values are obtained as a linear combination of Advantages (X1), Important factors for deciding on e-shopping (X2), Product Selection and Quality (X3), Medium to choose Online retailer (X4), Website Security (X5), Remedial measures to overcome Online Frauds (X6), Delivery and Return Policy (X7) and Trust (X8), the coefficient value of 0.635 indicates that the relationship between Customer Satisfaction and Repeated Purchases and the eight independent variables is quite strong and positive.
The Coefficient of Determination R-square measures the goodness-of-fit of the estimated Sample Regression Plane (SRP) in terms of the proportion of the variation in the dependent variables explained by the fitted sample regression equation. Thus, the value of R square is 0.403 simply means that about 40.3 percent of the variation in Customer Satisfaction and Repeated Purchases is explained by the estimated SRP that uses Advantages, Important factors for deciding on e-shopping, Product Selection and Quality, Medium to choose Online retailer, Website Security, Remedial measures to overcome Online Frauds, Delivery and Return Policy and Trust as the independent variables and R square value is significant at 1 percent level.

The multiple regression equation is
\[ Y = 0.992 + 0.122X_1 + 0.073X_2 + 0.301X_3 + 0.083X_4 + 0.011X_5 + 0.140X_6 + 0.363X_7 + 0.320X_8 \]

Here, the coefficient of \( X_1 \) (0.122), \( X_3 \) (0.301), \( X_7 \) (0.363), \( X_8 \) (0.320) represents the partial effect of Advantages, Product Selection and Quality, Delivery and Return Policy and Trust on Customer Satisfaction and Repeated Purchases, holding other variables as constant. The estimated positive sign implies that such effect is positive that Customer Satisfaction and Repeated Purchases score would increase by 0.122, 0.301, 0.636 and 0.320 for every unit increase in Advantages, Product Selection and Quality, Delivery and Return Policy and Trust respectively and this coefficient value is significant at 1 percent level.

The coefficient of \( X_4 \) (0.083), \( X_6 \) (0.140) represents the partial effect of Medium to choose Online retailer, Remedial measures to overcome Online Frauds on Customer Satisfaction and Repeated Purchases, holding other variables as constant. The
estimated positive sign implies that such effect is positive that Customer Satisfaction and Repeated Purchases score would increase by 0.083 and 0.140 for every unit increase in Medium to choose Online retailer and Remedial measures to overcome Online Frauds respectively and this coefficient value is significant at 5 percent level.

The coefficient of $X_2$ (0.073), $X_5$ (0.011) represents the partial effect of Important factors for deciding on e-shopping, Website Security on Customer Satisfaction and Repeated Purchases, holding other variables as constant. The estimated positive sign implies that such effect is positive that Customer Satisfaction and Repeated Purchases score would increase by 0.073 and 0.011 for every unit increase in Important factors for deciding on e-shopping, Website Security respectively and this coefficient value is not significant at 5 percent level.

Based on Standard Co-efficient ($\beta$), Product Selection and Quality ($X_3$) is the most important factor in extracting Customer Satisfaction and Repeated Purchases followed by Delivery and Return Policy ($X_3$) and Trust ($X_8$).

**STRUCTURAL EQUATION MODEL ON CONSUMER PURCHASES**

**BASIC INTRODUCTION ON SEM**
Structural equation modeling is a general term that has been used to describe a large number of statistical models used to evaluate the validity of substantive theories with empirical data. Statistically, it represents an extension of general linear modeling (GLM) procedures, such as the ANOVA and multiple regression analysis. SEM is also sometimes called covariance structure analysis.
One of the primary advantages of SEM is that it can be used to study the relationships among latent constructs that are indicated by multiple measures. It is applicable to both experimental and non-experimental data, as well as cross-sectional and longitudinal data.

In SEM, a variable can serve both as a source variable called an exogenous variable, which is analogous to an independent variable and a result variable called an endogenous variable, which is analogous to a dependent variable in a chain of causal hypotheses.

SEM takes a confirmatory (hypothesis testing) approach to the multivariate analysis of a structural theory, one that stipulates causal relations among multiple variables. The goal is to determine whether a hypothesized theoretical model is consistent with the data collected to reflect this theory. The consistency is evaluated through model-data fit. SEM is a large sample technique (usually N > 200; e.g., Kline, 2005, pp. 111, 178) and the sample size required is somewhat dependent on model complexity, the estimation method used, and the distributional characteristics of observed variables (Kline, pp. 14–15).

**The variables used in the structural equation model are given as follows:**

I Observed, endogenous variables
   1. Customer Satisfaction and Repeated Purchases
2. Trust

II Observed, exogenous variables
1. Products Selection and Quality
2. Website Security
3. Advantages
4. Delivery & Return Policy

III Unobserved, exogenous variables
1. e1: Error term for Customer Satisfaction and Repeated Purchases
2. e2: Error term for Trust

Number of variables in the SEM are:

- Number of variables in the model: 8
- Number of observed variables: 6
- Number of unobserved variables: 2
- Number of exogenous variables: 6
- Number of endogenous variables: 2
Figure 4.3.21 Structural Equation Model on Consumer Purchases

Source: Primary Data

Table 4.3.22 Variables in the Structural Equation Model Analysis of Consumer Purchases
<table>
<thead>
<tr>
<th>Variables</th>
<th>Unstandardised co-efficient (B)</th>
<th>S.E of B</th>
<th>Standardised co-efficient (β)</th>
<th>t value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust &lt;--- Product Selection and Quality</td>
<td>0.043</td>
<td>0.017</td>
<td>0.073</td>
<td>2.469</td>
<td>0.014*</td>
</tr>
<tr>
<td>Trust &lt;--- Website Security</td>
<td>0.058</td>
<td>0.019</td>
<td>0.091</td>
<td>3.006</td>
<td>0.003**</td>
</tr>
<tr>
<td>Trust &lt;--- Delivery and Return Policy</td>
<td>0.612</td>
<td>0.031</td>
<td>0.620</td>
<td>19.591</td>
<td>&lt;0.001**</td>
</tr>
<tr>
<td>Trust &lt;--- Advantages</td>
<td>0.083</td>
<td>0.019</td>
<td>0.133</td>
<td>4.278</td>
<td>&lt;0.001**</td>
</tr>
<tr>
<td>Customer Satisfaction and Repeated Purchases &lt;--- Trust</td>
<td>1.107</td>
<td>0.093</td>
<td>0.731</td>
<td>11.888</td>
<td>&lt;0.001**</td>
</tr>
</tbody>
</table>

**Source: Primary Data**

Note: ** Denotes significant at 1 percent level  
* Denotes significant at 5 percent level

Here, the coefficient of **Product Selection and Quality** is **0.043** represents the partial effect of Product Selection and Quality on Trust, holding Website Security, Delivery & Return Policy, Advantages and Trust as constant. The estimated positive sign implies that such effect is positive that Trust would increase by 0.043 for every unit increase in Product Selection and Quality and this coefficient value is significant at 5 percent level.

The coefficient of **Website Security** is **0.058** represents the partial effect of Website Security on Trust, holding Product Selection and Quality, Delivery & Return Policy, Advantages and Trust as constant. The estimated positive sign implies that such effect is positive that Trust would increase by 0.058 for every unit increase in Website Security.
Security and this coefficient value is significant at 1 percent level.

The coefficient of **Delivery & Return Policy** is **0.612** represents the partial effect of Delivery & Return Policy on Trust, holding Product Selection and Quality, Website Security, Advantages and Trust as constant. The estimated positive sign implies that such effect is positive that Trust would increase by 0.612 for every unit increase in Delivery & Return Policy and this coefficient value is significant at 1 percent level.

The coefficient of **Advantages** is **0.083** represents the partial effect of Advantages on Trust, holding Product Selection and Quality, Website Security, Delivery & Return Policy and Trust as constant. The estimated positive sign implies that such effect is positive that Trust would increase by 0.083 for every unit increase in Advantages and this coefficient value is significant at 1 percent level.

The coefficient of **Trust** is **1.107** represents the partial effect of Trust on Customer Satisfaction & Repeated Purchases, holding Product Selection and Quality, Website Security, Delivery & Return Policy, Advantages as constant. The estimated positive sign implies that such effect is positive that Customer Satisfaction & Repeated Purchases would increase by 1.107 for every unit increase in Trust and this coefficient value is significant at 1 percent level.

Table 4.3.23 Model fit summary for SEM on Consumer Purchases
Structural Equation Modeling (SEM): Model fit assessment

Structural equation modeling was used to analyze the suitability of the model based upon the collected samples. As recommended by Anderson and Gerbing (1988), measurement model to test the reliability and validity of the survey instrument was analyzed first, and by using AMOS version 16 the structural model was analyzed. The structural equation model (SEM) is most useful when assessing the causal relationship between variables as well as verifying the compatibility of the model used (Peter, 2011). Structural equation modeling evaluates whether the data fit a theoretical model.

In order to evaluate the model, emphasis was given to Chi-square, CFI, GFI, AGFI, RMR and RMSEA (Table above). As per the result, Chi square statistics with $p = 0.000$ does not show a good fit of the model. Nevertheless, according to Schumaker and Lomax (1996), a sample size of over 200 (520 in this research), could affect Chi-Square statistics to indicate a significant probability level ($p=0.00$). Consequently, this model is considered for further interpretation in the goodness of fit measures. Common model-fit measures like chi-square, the comparative fit index (CFI), root mean square error of approximation (RMSEA) were used to estimate the measurement model fit.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
<th>Suggested Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-square</td>
<td>6.368</td>
<td>-</td>
</tr>
<tr>
<td>P value</td>
<td>0.095</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>GFI</td>
<td>0.935</td>
<td>&gt;0.90 (Hair et al. 2006)</td>
</tr>
<tr>
<td>AGFI</td>
<td>0.924</td>
<td>&gt; 0.90 (Daire et al., 2008)</td>
</tr>
<tr>
<td>CFI</td>
<td>0.941</td>
<td>&gt;0.90 (Hu and Bentler, 1999)</td>
</tr>
<tr>
<td>RMR</td>
<td>0.028</td>
<td>&lt; 0.10 (Hair et al., 2006)</td>
</tr>
<tr>
<td>RMSEA</td>
<td>0.076</td>
<td>&lt; 0.10 (Hair et al., 2006)</td>
</tr>
</tbody>
</table>

Source: Primary Data
From the above table, it is found that the calculated P value is 0.095 which is greater than 0.05 which indicates perfectly fit. Here, GFI (Goodness of Fit Index) value and AGFI (Adjusted Goodness of Fit Index) value is greater than 0.9 which represent it is a good fit. The calculated CFI (Comparative Fit Index) value is 0.941 which means that it is a good fit. It is found that RMR (Root Mean Square Residuals) and RMSEA (Root Mean Square Error of Approximation) value is 0.028 and 0.076 respectively and they are less than 0.10 indicating that it is a perfectly fit model.

4.4 DESCRIPTIVE ANALYSIS ON RETAILERS
Percentage analysis is one of the statistical measures used to describe the characteristics of the sample. Percentage analysis involves computing measures of variables selected of the study and its finding will give easy interpretation for the reader.

<table>
<thead>
<tr>
<th>Number of years doing the line of business</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upto 10</td>
<td>73</td>
<td>40.6</td>
</tr>
<tr>
<td>11-20</td>
<td>58</td>
<td>32.2</td>
</tr>
<tr>
<td>Above 20</td>
<td>49</td>
<td>27.2</td>
</tr>
<tr>
<td>Total</td>
<td>180</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Primary Data

Table 4.4.1 shows that 40.6 percent of the respondents are pursuing the line of business upto 10 years, while 32.2 percent are doing for 11-20 years and 27.2 percent are doing above 20 years of business. So, the percentage analysis reveals that maximum number of retailers are doing their line of business upto 10 years in this study.
Table 4.4.2 Frequency Distribution of Shoppers in Chennai being aware of e-marketing

<table>
<thead>
<tr>
<th>Shoppers in Chennai are aware of e-marketing</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>166</td>
<td>92.2</td>
</tr>
<tr>
<td>No</td>
<td>14</td>
<td>7.8</td>
</tr>
<tr>
<td>Total</td>
<td>180</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Primary Data

Table 4.4.2 shows that 92.2 percent of the respondents say that Shoppers in Chennai are aware of e-marketing and the balance 7.8 percent feel otherwise. So, the percentage
analysis reveals that majority of the retailers feel that Shoppers in Chennai have great
awareness regarding e-marketing in this study.

Figure 4.4.2 Frequency Distribution of Shoppers in Chennai being
aware of e-marketing

Table 4.4.3 Frequency Distribution of Number of years pursuing Internet
Marketing

<table>
<thead>
<tr>
<th>Number of years pursuing Internet Marketing</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upto 3</td>
<td>52</td>
<td>28.9</td>
</tr>
<tr>
<td>4-6</td>
<td>98</td>
<td>54.4</td>
</tr>
<tr>
<td>Above 6</td>
<td>30</td>
<td>16.7</td>
</tr>
<tr>
<td>Total</td>
<td>180</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Primary Data

Table 4.4.3 shows that 28.9 percent of the respondents are pursuing internet marketing
upto 3 years, while 54.4 percent are doing for 4-6 years and 16.7 percent are doing
above 6 years of business. So, the percentage analysis reveals that majority of the retailers are pursuing internet marketing for 4-6 years in this study.

**Figure 4.4.3 Frequency Distribution of Number of years pursuing Internet Marketing**

![Frequency Distribution Graph]

**Table 4.4.4 Frequency Distribution of Stage of life cycle of e-marketing**

<table>
<thead>
<tr>
<th>Stage of life cycle of e-marketing</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nascent</td>
<td>26</td>
<td>14.4</td>
</tr>
<tr>
<td>Medieval</td>
<td>130</td>
<td>72.3</td>
</tr>
<tr>
<td>Maturity</td>
<td>24</td>
<td>13.3</td>
</tr>
<tr>
<td>Total</td>
<td>180</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Source: Primary Data*
Table 4.4.4 shows that 14.4 percent of the respondents feel that e-marketing is in nascent stage, while 72.3 percent feel that e-marketing is in medieval stage and the balance 13.3 percent feel that e-marketing is in maturity stage. So, the percentage analysis reveals that majority of the retailers feel that e-marketing is in medieval stage in this study.

Figure 4.4.4 Frequency Distribution of Stage of life cycle of e-marketing

Table 4.4.5 Frequency Distribution of Age Group having more inclination towards online shopping

<table>
<thead>
<tr>
<th>Age Group having more inclination towards online shopping</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upto 25</td>
<td>45</td>
<td>25.0</td>
</tr>
<tr>
<td>26-40</td>
<td>112</td>
<td>62.2</td>
</tr>
<tr>
<td>Above 40</td>
<td>23</td>
<td>12.8</td>
</tr>
<tr>
<td>Total</td>
<td>180</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Primary Data

Table 4.4.5 shows that 25 percent of the respondents say that shoppers in the age group of upto 25 years have more inclination towards online shopping, while 62.2 percent belong to 26-40 years and the balance 23 percent belong to above 40 years.
category. So, the percentage analysis reveals that retailers feel that respondents who are more inclined to online shopping are in the age group of 26-40 years as per this study.

**Figure 4.4.5 Frequency Distribution of Age Group having more inclination towards online shopping**

<table>
<thead>
<tr>
<th>Age Group having more inclination towards online shopping</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upto 25</td>
<td>43</td>
<td>23.9</td>
</tr>
<tr>
<td>26-40</td>
<td>83</td>
<td>46.1</td>
</tr>
<tr>
<td>Above 40</td>
<td>38</td>
<td>21.1</td>
</tr>
<tr>
<td>Total</td>
<td>180</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**Source: Primary Data**

Table 4.4.6 shows that 23.9 percent of the respondents say that the category of Chennai shoppers interested in online shopping are professionals, while 46.1 percent are educated and employed Youth, 21.1 percent are people doing business and the balance 8.9 percent are others (pensioners and housewives). So, the percentage analysis reveals that majority of the retailers feel that Shoppers in Chennai who have more interest in online shopping are educated and employed Youth in this study.
Figure 4.4.6 Frequency Distribution of Category of people interested in online shopping

Table 4.4.7 Frequency Distribution of Physical store presence is necessary for a retailer doing online sales

<table>
<thead>
<tr>
<th>Physical store presence is necessary for a retailer doing online sales</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>140</td>
<td>77.8</td>
</tr>
<tr>
<td>No</td>
<td>40</td>
<td>22.2</td>
</tr>
<tr>
<td>Total</td>
<td>180</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Primary Data

Table 4.4.7 shows that 77.8 percent of the retailers feel that physical store presence is necessary for a retailer doing online sales but the remaining 22.2 percent feel that no store presence is required. So, the percentage analysis reveals that most of the retailers themselves feel that physical store is necessary for improving online sales in this study.
Figure 4.4.7 Frequency Distribution of Physical store presence is necessary for a retailer doing online sales

Table 4.4.8 Frequency Distribution of Rating of customers regarding online services

<table>
<thead>
<tr>
<th>Rating of customers regarding online services</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fair</td>
<td>37</td>
<td>20.6</td>
</tr>
<tr>
<td>Good</td>
<td>98</td>
<td>54.4</td>
</tr>
<tr>
<td>Excellent</td>
<td>45</td>
<td>25.0</td>
</tr>
<tr>
<td>Total</td>
<td>180</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Primary Data
Table 4.4.8 shows that 20.6 percent of the respondents say that fair rating is given by customers regarding online services, while 54.4 percent have given good rating, the balance 25 percent have given excellent rating. So, the percentage analysis reveals that majority of the retailers feel that Shoppers in Chennai have rated online services as good in this study.
Table 4.4.9 Frequency Distribution showing the retailers’ Perception of the future of e-marketing

<table>
<thead>
<tr>
<th>Perception of the future of e-marketing</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-Sales will surpass traditional sales</td>
<td>52</td>
<td>28.8</td>
</tr>
<tr>
<td>Traditional sales will have an upper hand</td>
<td>37</td>
<td>20.6</td>
</tr>
<tr>
<td>Both will co-exist in a balanced manner</td>
<td>91</td>
<td>50.6</td>
</tr>
<tr>
<td>Total</td>
<td>180</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**Source:** Primary Data

Table 4.4.9 shows that 28.8 percent of the respondents perceive that E-Sales will surpass traditional sales, while 20.6 percent feel that traditional sales will have an upper hand and the balance 50.6 percent feel that both will co-exist in a balanced manner. So, the percentage analysis reveals that majority of the retailers perceive that both traditional sales and e-sales will co-exist in a balanced manner in future in this
study.

Figure 4.4.9 Frequency Distribution showing the retailers’ Perception of the future of e-marketing

![Bar chart showing retailers' perception of the future of e-marketing.]

Table 4.4.10 Mean and SD for Factors of Convenience

<table>
<thead>
<tr>
<th>Factors of Convenience</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Convenience (24*7)</td>
<td>4.63</td>
<td>0.63</td>
</tr>
<tr>
<td>Time Saving</td>
<td>4.14</td>
<td>0.61</td>
</tr>
<tr>
<td>Safe &amp; Secure</td>
<td>3.66</td>
<td>0.67</td>
</tr>
<tr>
<td>Lower Prices</td>
<td>3.20</td>
<td>0.68</td>
</tr>
<tr>
<td>Elimination of boundaries</td>
<td>4.23</td>
<td>0.71</td>
</tr>
<tr>
<td>Wide Product/Service options</td>
<td>3.74</td>
<td>0.70</td>
</tr>
</tbody>
</table>

Source: Primary Data

Table 4.4.10 shows that Convenience is ranked as the most important Point of Advantage since its mean score is 4.63 while Lower prices is ranked as the last factor at a mean score of 3.20.
Table 4.4.11 Mean and SD for Factors Important and convenient in E-Marketing

<table>
<thead>
<tr>
<th>Factors Important and convenient in E-Marketing</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Best Product Pricing</td>
<td>4.37</td>
<td>0.61</td>
</tr>
<tr>
<td>Best Product Selection, Description and Information</td>
<td>4.33</td>
<td>0.63</td>
</tr>
<tr>
<td>Good Shipping Options</td>
<td>4.53</td>
<td>0.63</td>
</tr>
<tr>
<td>Trusted Website Security Certificate</td>
<td>4.81</td>
<td>0.48</td>
</tr>
<tr>
<td>Strong Customer Service Support</td>
<td>4.57</td>
<td>0.57</td>
</tr>
<tr>
<td>Reliable Return Policy Norms</td>
<td>4.22</td>
<td>0.60</td>
</tr>
<tr>
<td>Ratings given by Customers</td>
<td>4.12</td>
<td>0.48</td>
</tr>
</tbody>
</table>

**Source: Primary Data**

Table 4.4.11 shows that Trusted Website Security Certificate is ranked as the most important Factor for deciding on E-shopping since its mean score is 4.81 while Ratings given by customers is ranked last with a mean score of 4.12.

Table 4.4.12 Mean and SD for Factors showing Products mostly purchased Online

<table>
<thead>
<tr>
<th>Factors showing Products mostly purchased Online</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Electronics</td>
<td>3.73</td>
<td>0.64</td>
</tr>
<tr>
<td>Music &amp; Books</td>
<td>3.82</td>
<td>0.73</td>
</tr>
<tr>
<td>Travel and Entertainment</td>
<td>4.63</td>
<td>0.68</td>
</tr>
<tr>
<td>Apparels &amp; Clothing</td>
<td>3.70</td>
<td>0.97</td>
</tr>
<tr>
<td>Jewellery</td>
<td>2.53</td>
<td>1.00</td>
</tr>
<tr>
<td>Low Value Products</td>
<td>4.58</td>
<td>0.72</td>
</tr>
</tbody>
</table>

**Source: Primary Data**

Table 4.4.12 shows that Travel and Entertainment is ranked as the most important Product mostly purchased online since its mean score is 4.63 while Jewellery is ranked last with a mean score of 2.53.
Table 4.4.13 Mean and SD for Medium to bring Community Involvement & Awareness

<table>
<thead>
<tr>
<th>Medium to bring Community Involvement &amp; Awareness</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommendation by Friends</td>
<td>4.37</td>
<td>0.63</td>
</tr>
<tr>
<td>Advertisement in TV, Radio, Print &amp; Content Marketing</td>
<td>4.00</td>
<td>0.62</td>
</tr>
<tr>
<td>Search engine Ads</td>
<td>4.44</td>
<td>0.68</td>
</tr>
<tr>
<td>Social Networking Ads (Facebook, Blog)</td>
<td>4.73</td>
<td>0.53</td>
</tr>
<tr>
<td>Co-marketing(Partnering)</td>
<td>3.30</td>
<td>0.69</td>
</tr>
<tr>
<td>Online Advertising (Banners, Pay per Click etc)</td>
<td>3.83</td>
<td>0.70</td>
</tr>
</tbody>
</table>

Source: Primary Data

Table 4.4.13 shows that Social Networking Ads (Facebook, Blog) is ranked as the most important Factor for choosing an online retailer since its mean score is 4.73 while Co-marketing (partnering) is ranked last with a mean score of 3.30.

Table 4.4.14 Mean and SD for Factors threatening website security

<table>
<thead>
<tr>
<th>Factors threatening website security</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online Debit or Credit Card Fraud</td>
<td>4.66</td>
<td>0.68</td>
</tr>
<tr>
<td>Paying for Goods but not receiving them</td>
<td>3.87</td>
<td>0.77</td>
</tr>
<tr>
<td>Phishing (Stealing Data) &amp; Hacking</td>
<td>3.98</td>
<td>0.61</td>
</tr>
<tr>
<td>Password Stealing</td>
<td>3.83</td>
<td>0.77</td>
</tr>
<tr>
<td>Misleading bogus advertisement</td>
<td>3.26</td>
<td>0.75</td>
</tr>
<tr>
<td>Wrong e-mail and contact address</td>
<td>3.21</td>
<td>0.92</td>
</tr>
</tbody>
</table>

Source: Primary Data

Table 4.4.14 shows that Online Debit or Credit Card Fraud is ranked as the most important Factor threatening website security since its mean score is 4.66 while Wrong e-mail and contact address is ranked last with a mean score of 3.21.
Table 4.4.15 Mean and SD for Factors to overcome Online threats and frauds

<table>
<thead>
<tr>
<th>Factors to overcome Online threats and frauds</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>High penalty for cyber crime</td>
<td>4.68</td>
<td>0.71</td>
</tr>
<tr>
<td>Clear cut definition of cyber laws</td>
<td>4.33</td>
<td>0.71</td>
</tr>
<tr>
<td>Creating awareness among public and online shoppers</td>
<td>4.48</td>
<td>0.50</td>
</tr>
<tr>
<td>Stringent punishments for cyber frauds</td>
<td>4.23</td>
<td>0.68</td>
</tr>
<tr>
<td>Strengthening Website Design and Features</td>
<td>4.30</td>
<td>0.58</td>
</tr>
<tr>
<td>Good Tracking Systems</td>
<td>4.34</td>
<td>0.54</td>
</tr>
</tbody>
</table>

**Source: Primary Data**

Table 4.4.15 shows that High penalty for cyber crime is ranked as the most important Factor to overcome Online threats and frauds since its mean score is 4.68 while Stringent punishments for cyber frauds is ranked last with a mean score of 4.23.

Table 4.4.16 Mean and SD for Factors regarding Trust building measures

<table>
<thead>
<tr>
<th>Factors regarding Trust building measures</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate response to Complaints</td>
<td>4.74</td>
<td>0.47</td>
</tr>
<tr>
<td>Reduce Cyber Threats</td>
<td>4.27</td>
<td>0.56</td>
</tr>
<tr>
<td>Genuine Products and Discounts</td>
<td>4.14</td>
<td>0.63</td>
</tr>
<tr>
<td>Clear Cut Return Policy Norms</td>
<td>4.34</td>
<td>0.69</td>
</tr>
</tbody>
</table>

**Source: Primary Data**

Table 4.4.16 shows that Immediate response to Complaints is ranked as the most important Factor regarding Trust building measures since its mean score is 4.74 while Genuine Products and Discounts is ranked last with a mean score of 4.14.
Table 4.4.17 Mean and SD for Factors of Customer Satisfaction and repeated purchases

<table>
<thead>
<tr>
<th>Factors of Customer Satisfaction and repeated purchases</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase in e-sales volume</td>
<td>4.48</td>
<td>0.60</td>
</tr>
<tr>
<td>Increase in number of customers</td>
<td>4.26</td>
<td>0.58</td>
</tr>
<tr>
<td>Good Feedback on Social Networking Sites</td>
<td>4.53</td>
<td>0.63</td>
</tr>
<tr>
<td>Good Rating in the website</td>
<td>4.32</td>
<td>0.59</td>
</tr>
<tr>
<td>Repeated Purchases by existing customers</td>
<td>4.44</td>
<td>0.60</td>
</tr>
</tbody>
</table>

Source: Primary Data

Table 4.4.17 shows that Good Feedback on Social Networking Sites is ranked as the most important Factor on Customer Satisfaction and Repeated Purchases since its mean score is 4.53 while Increase in number of customers is ranked last with a mean score of 4.26.

4.5 INFERENTIAL ANALYSIS ON RETAILERS

Differences between two groups in the mean scores of variables are studied using Student t test and it is discussed in this section. Also Chi-square test, Correlation Analysis and Regression Analysis are used to verify the hypothesis stated in the first chapter.

HYPOTHESIS I

Null Hypothesis: There is no significant difference between Number of years doing the line of business with respect to Factors on Retailers.
### Table 4.5.1 ANOVA for significant difference between Number of years doing the line of business with respect to Factors on Retailers

<table>
<thead>
<tr>
<th>Factors on Retailers</th>
<th>Number of years doing the line of business</th>
<th>F value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Upto 10</td>
<td>11-20</td>
<td>Above 20</td>
</tr>
<tr>
<td>Perception of the future of e-marketing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.89(^a)</td>
<td>2.45(^b)</td>
<td>2.43(^b)</td>
</tr>
<tr>
<td></td>
<td>(0.89)</td>
<td>(0.68)</td>
<td>(0.89)</td>
</tr>
<tr>
<td>Convenience</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>23.68(^b)</td>
<td>21.79(^a)</td>
<td>24.98(^b)</td>
</tr>
<tr>
<td></td>
<td>(3.74)</td>
<td>(4.10)</td>
<td>(3.20)</td>
</tr>
<tr>
<td>Important and convenient in E-Marketing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>31.05</td>
<td>30.41</td>
<td>31.45</td>
</tr>
<tr>
<td></td>
<td>(3.05)</td>
<td>(2.50)</td>
<td>(1.39)</td>
</tr>
<tr>
<td>Product Value and Range</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>21.77</td>
<td>21.74</td>
<td>23.37</td>
</tr>
<tr>
<td></td>
<td>(4.41)</td>
<td>(4.74)</td>
<td>(3.07)</td>
</tr>
<tr>
<td>Community Involvement and Awareness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>23.77(^a)</td>
<td>23.97(^a)</td>
<td>25.53(^b)</td>
</tr>
<tr>
<td></td>
<td>(3.34)</td>
<td>(3.59)</td>
<td>(2.92)</td>
</tr>
<tr>
<td>Website Security</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>22.25(^a)</td>
<td>21.91(^a)</td>
<td>23.88(^b)</td>
</tr>
<tr>
<td></td>
<td>(3.41)</td>
<td>(4.01)</td>
<td>(3.08)</td>
</tr>
<tr>
<td>Overcoming Online Frauds and increasing website security</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>26.03</td>
<td>26.64</td>
<td>26.53</td>
</tr>
<tr>
<td></td>
<td>(2.79)</td>
<td>(1.80)</td>
<td>(1.63)</td>
</tr>
<tr>
<td>Trust</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>17.41</td>
<td>17.16</td>
<td>18.00</td>
</tr>
<tr>
<td></td>
<td>(1.94)</td>
<td>(1.82)</td>
<td>(1.59)</td>
</tr>
<tr>
<td>Customer Satisfaction and Repeated Purchases</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>21.05(^ab)</td>
<td>20.59(^a)</td>
<td>22.39(^b)</td>
</tr>
<tr>
<td></td>
<td>(3.86)</td>
<td>(3.93)</td>
<td>(3.42)</td>
</tr>
<tr>
<td>Increase in E-Sales</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>13.53</td>
<td>14.03</td>
<td>13.27</td>
</tr>
<tr>
<td></td>
<td>(2.80)</td>
<td>(3.29)</td>
<td>(2.25)</td>
</tr>
</tbody>
</table>

**Source:** Primary Data

**Note:**
1. The value within bracket refers to SD
2. ** Denotes significant at 1 percent level
3. * Denotes significant at 5 percent level
4. Different alphabet between Number of years doing the line of business denotes significance at 5 percent Level using Duncan Multiple Range Test (DMRT).

Since P value is less than 0.01, the null hypothesis is rejected at 1 percent level of significance. Hence, concluded that there is significant difference between Number of years doing the line of business and Factors on Retailers with regard to Perception of the future of e-marketing and Convenience. Based on Duncan Multiple Range test,
with respect to Perception of the future of e-marketing retail business which has been doing business upto 10 years significantly differ with those doing business between 11-20 years and above 20 years but there is no significant difference between 11-20 years and above 20 years. In Convenience, retail business which has been doing business between 11-20 years significantly differ with those doing business upto 10 years and above 20 years but there is no significant difference between upto 10 years and above 20 years.

There is significant difference between Number of years doing the line of business and Factors on Retailers with regard to Community Involvement and Awareness, Website Security and Customer Satisfaction and Repeated Purchases. Since P value is less than 0.05, the null hypothesis is rejected at 5 percent level of significance. Based on DMRT, retail business which has been doing business above 20 years significantly differ with those doing business upto 10 years and between 11-20 years with regard to Community Involvement and Awareness, Website Security and Customer Satisfaction and Repeated Purchases.

There is no significant difference between Number of years doing the line of business and Factors on Retailers with regard to Important and convenient in E-Marketing, Product Value and Range, Overcoming Online Frauds and increasing website security, Trust and Increase in E-Sales. Since P value is more than 0.05, the null hypothesis is accepted at 5 percent level of significance.
HYPOTHESIS II
Null Hypothesis: There is no significant difference between Number of years pursuing Internet Marketing with respect to Factors on Retailers.

Table 4.5.2 ANOVA for significant difference between Number of years pursuing Internet Marketing with respect to Factors on Retailers

<table>
<thead>
<tr>
<th>Factors on Retailers</th>
<th>Number of years pursuing Internet Marketing</th>
<th>F value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Upto 3</td>
<td>4-6</td>
<td>Above 6</td>
</tr>
<tr>
<td>Perception of the future of e-marketing</td>
<td>2.46&lt;sup&gt;b&lt;/sup&gt;</td>
<td>2.16&lt;sup&gt;a,b&lt;/sup&gt;</td>
<td>1.97&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>(0.70)</td>
<td>(0.90)</td>
<td>(0.93)</td>
</tr>
<tr>
<td>Convenience</td>
<td>21.67&lt;sup&gt;a&lt;/sup&gt;</td>
<td>24.63&lt;sup&gt;b&lt;/sup&gt;</td>
<td>22.53&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>(4.15)</td>
<td>(3.33)</td>
<td>(3.96)</td>
</tr>
<tr>
<td>Important and convenient in E-Marketing</td>
<td>30.06&lt;sup&gt;a&lt;/sup&gt;</td>
<td>31.41&lt;sup&gt;b&lt;/sup&gt;</td>
<td>31.03&lt;sup&gt;a,b&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>(3.56)</td>
<td>(1.76)</td>
<td>(2.19)</td>
</tr>
<tr>
<td>Product Value and Range</td>
<td>20.38&lt;sup&gt;a&lt;/sup&gt;</td>
<td>23.33&lt;sup&gt;b&lt;/sup&gt;</td>
<td>21.63&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>(5.56)</td>
<td>(3.11)</td>
<td>(3.76)</td>
</tr>
<tr>
<td>Community Involvement and Awareness</td>
<td>22.31&lt;sup&gt;a&lt;/sup&gt;</td>
<td>25.44&lt;sup&gt;c&lt;/sup&gt;</td>
<td>24.10&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>(4.15)</td>
<td>(2.50)</td>
<td>(2.84)</td>
</tr>
<tr>
<td>Website Security</td>
<td>21.50&lt;sup&gt;a&lt;/sup&gt;</td>
<td>23.51&lt;sup&gt;b&lt;/sup&gt;</td>
<td>21.43&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>(4.44)</td>
<td>(2.95)</td>
<td>(3.17)</td>
</tr>
<tr>
<td>Overcoming Online Frauds and increasing website security</td>
<td>26.15&lt;sup&gt;a&lt;/sup&gt;</td>
<td>26.36&lt;sup&gt;b&lt;/sup&gt;</td>
<td>26.73&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>(2.62)</td>
<td>(2.21)</td>
<td>(1.46)</td>
</tr>
<tr>
<td>Trust</td>
<td>16.77&lt;sup&gt;a&lt;/sup&gt;</td>
<td>18.05&lt;sup&gt;b&lt;/sup&gt;</td>
<td>16.90&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>(1.97)</td>
<td>(1.56)</td>
<td>(1.86)</td>
</tr>
<tr>
<td>Customer Satisfaction and Repeated Purchases</td>
<td>19.58&lt;sup&gt;a&lt;/sup&gt;</td>
<td>21.97&lt;sup&gt;b&lt;/sup&gt;</td>
<td>21.90&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>(4.34)</td>
<td>(3.51)</td>
<td>(2.88)</td>
</tr>
<tr>
<td>Increase in E-Sales</td>
<td>13.19</td>
<td>13.76</td>
<td>13.93</td>
</tr>
<tr>
<td></td>
<td>(2.66)</td>
<td>(2.80)</td>
<td>(3.25)</td>
</tr>
</tbody>
</table>

Source: Primary Data
Note:  1. The value within bracket refers to SD
2. ** Denotes significant at 1 percent level
3. * Denotes significant at 5 percent level
4. Different alphabet between Number of years pursuing Internet Marketing denotes significance at 5 percent Level using Duncan Multiple Range Test (DMRT).
Since P value is less than 0.01, the null hypothesis is rejected at 1 percent level of significance. Hence, concluded that there is significant difference between Number of years pursuing Internet Marketing and Factors on Retailers with regard to Convenience, Important and convenient in E-Marketing, Product Value and Range, Community Involvement and Awareness, Website Security, Trust and Customer Satisfaction and Repeated Purchases. Based on Duncan Multiple Range test, retailers pursuing internet marketing for 4-6 years vary significantly from upto 3 years and above 6 years with regard to Convenience, Important and convenient in E-Marketing, Product Value and Range, Community Involvement and Awareness, Website Security, Trust and Customer Satisfaction and Repeated Purchases. But there is no significant difference between upto 3 years and above 6 years group.

Since P value is less than 0.05, the null hypothesis is rejected at 5 percent level of significance. Hence, concluded that there is significant difference between Number of years pursuing Internet Marketing and Factors on Retailers with regard to Perception of the future of e-marketing. Based on DMRT, retailers pursuing internet marketing upto 3 years have more Perception of the future of e-marketing compared to above 6 years while those between 4-6 years do not vary significantly vary with other groups.

There is no significant difference between Number of years pursuing Internet Marketing and Factors on Retailers with regard to Overcoming Online Frauds and increasing website security and Increase in E-Sales. Since P value is more than 0.05, the null hypothesis is accepted at 5 percent level of significance. Hence, concluded that all retailers feel that overcoming cyber frauds go a long way in strengthening e-sales and
improving the confidence of all e-shoppers.

**HYPOTHESIS III**
Null Hypothesis: There is no significant difference between Stage of life cycle of e-marketing with respect to Factors on Retailers.

<table>
<thead>
<tr>
<th>Factors on Retailers</th>
<th>Stage of life cycle of e-marketing</th>
<th>F value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nascent</td>
<td>Medieval</td>
<td>Maturity</td>
</tr>
<tr>
<td>Perception of the future of e-marketing</td>
<td>2.04 (0.66)</td>
<td>2.22 (0.93)</td>
<td>2.38 (0.71)</td>
</tr>
<tr>
<td>Convenience</td>
<td>22.62 (5.54)</td>
<td>23.53 (3.13)</td>
<td>23.75 (5.44)</td>
</tr>
<tr>
<td>Important and convenient in E-Marketing</td>
<td>31.96 b (1.68)</td>
<td>30.99 b (2.46)</td>
<td>29.67 a (3.19)</td>
</tr>
<tr>
<td>Product Value and Range</td>
<td>21.00 (5.71)</td>
<td>22.63 (3.66)</td>
<td>21.13 (5.09)</td>
</tr>
<tr>
<td>Community Involvement and Awareness</td>
<td>24.96 (5.11)</td>
<td>24.22 (2.94)</td>
<td>24.13 (3.42)</td>
</tr>
<tr>
<td>Website Security</td>
<td>24.69 c (4.03)</td>
<td>22.80 b (2.78)</td>
<td>19.13 a (4.74)</td>
</tr>
<tr>
<td>Overcoming Online Frauds and increasing website security</td>
<td>27.42 b (2.45)</td>
<td>26.32 a (1.74)</td>
<td>25.42 a (3.59)</td>
</tr>
<tr>
<td>Trust</td>
<td>18.65 b (2.19)</td>
<td>17.26 a (1.49)</td>
<td>17.46 a (2.57)</td>
</tr>
<tr>
<td>Customer Satisfaction and Repeated Purchases</td>
<td>20.65 b (5.27)</td>
<td>21.95 b (2.93)</td>
<td>18.21 a (4.73)</td>
</tr>
<tr>
<td>Increase in E-Sales</td>
<td>13.35 a b (2.93)</td>
<td>13.94 b (2.93)</td>
<td>12.21 a (4.73)</td>
</tr>
</tbody>
</table>
Since P value is less than 0.01, the null hypothesis is rejected at 1 percent level of significance. Hence, concluded that there is significant difference between Stage of life cycle of e-marketing and Factors on Retailers with regard to Important and convenient in E-Marketing, Website Security, Overcoming Online Frauds and increasing website security, Trust, Customer Satisfaction and Repeated Purchases and Increase in E-Sales. Based on DMRT, retailers feeling that e-marketing is in Nascent and Medieval stage differ significantly with Maturity stage retailers regarding Important and convenient in E-Marketing, Customer Satisfaction and Repeated Purchases and Increase in E-Sales. Retailers feeling that e-marketing is in Nascent stage differ significantly with Medieval stage retailers and they differ significantly with Maturity stage retailers regarding Website Security. Since P value is more than 0.05, the null hypothesis is accepted at 5 percent level of significance with regard to Perception of the future of e-marketing, Convenience, Product Value and Range and Community Involvement and Awareness. There is no significant difference between Stage of life cycle of e-marketing and Factors on Retailers with regard to Perception of the future of e-marketing, Convenience,
Product Value and Range and Community Involvement and Awareness. Hence, concluded that all retailers feel that the e-marketing is here to stay in this world of technology and advancement.

**HYPOTHESIS IV**
Null Hypothesis: There is no significant difference between Age Group having more inclination towards online shopping with respect to Factors on Retailers.

Table 4.5.4 ANOVA for significant difference between Age Group having more inclination towards online shopping with respect to Factors on Retailers

<table>
<thead>
<tr>
<th>Factors on Retailers</th>
<th>Age Group having more inclination towards online shopping</th>
<th>F value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Upto 25</td>
<td>26-40</td>
<td>Above 40</td>
</tr>
<tr>
<td>Perception of the future of e-marketing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.40(^a)</td>
<td>2.09(^a)</td>
<td>2.48(^a)</td>
</tr>
<tr>
<td></td>
<td>(0.84)</td>
<td>(0.89)</td>
<td>(0.73)</td>
</tr>
<tr>
<td>Convenience</td>
<td>23.73(^b)</td>
<td>23.72(^b)</td>
<td>21.39(^a)</td>
</tr>
<tr>
<td></td>
<td>(4.44)</td>
<td>(3.50)</td>
<td>(4.27)</td>
</tr>
<tr>
<td>Important and convenient in E-Marketing</td>
<td>31.69(^b)</td>
<td>31.10(^b)</td>
<td>28.83(^a)</td>
</tr>
<tr>
<td></td>
<td>(2.16)</td>
<td>(2.60)</td>
<td>(1.72)</td>
</tr>
<tr>
<td>Product Value and Range</td>
<td>23.09(^b)</td>
<td>22.30(^b)</td>
<td>19.91(^a)</td>
</tr>
<tr>
<td></td>
<td>(5.16)</td>
<td>(3.53)</td>
<td>(4.83)</td>
</tr>
<tr>
<td>Community Involvement and Awareness</td>
<td>24.76(^b)</td>
<td>24.51(^b)</td>
<td>22.48(^a)</td>
</tr>
<tr>
<td></td>
<td>(3.91)</td>
<td>(2.85)</td>
<td>(4.20)</td>
</tr>
<tr>
<td>Website Security</td>
<td>23.58(^b)</td>
<td>22.44(^a)</td>
<td>21.35(^a)</td>
</tr>
<tr>
<td></td>
<td>(3.84)</td>
<td>(3.61)</td>
<td>(2.59)</td>
</tr>
<tr>
<td>Overcoming Online Frauds and increasing website security</td>
<td>26.40</td>
<td>26.31</td>
<td>26.52</td>
</tr>
<tr>
<td></td>
<td>(2.44)</td>
<td>(2.21)</td>
<td>(1.93)</td>
</tr>
<tr>
<td>Trust</td>
<td>17.96(^b)</td>
<td>17.57(^b)</td>
<td>16.17(^a)</td>
</tr>
<tr>
<td></td>
<td>(2.13)</td>
<td>(1.68)</td>
<td>(1.30)</td>
</tr>
<tr>
<td>Customer Satisfaction and</td>
<td>22.51(^b)</td>
<td>21.22(^b)</td>
<td>19.04(^a)</td>
</tr>
</tbody>
</table>
Repeated Purchases  (2.61)  (3.68)  (5.31)  6.704
Increase in E-Sales    13.13  13.81  13.65  0.401
                    (2.10)  (2.93)  (3.56)  0.919

**Source: Primary Data**

Note:  1. The value within bracket refers to SD
2. ** Denotes significant at 1 percent level
3. * Denotes significant at 5 percent level
4. Different alphabet between Age Group having more inclination towards online shopping denotes significance at 5 percent Level using Duncan Multiple Range Test (DMRT).

Since P value is less than 0.01, the null hypothesis is rejected at 1 percent level of significance. Hence, concluded that there is significant difference between Age Group having more inclination towards online shopping and Factors on Retailers with regard to Important and convenient in E-Marketing, Trust and Customer Satisfaction and Repeated Purchases. Based on DMRT, retailers feel that respondents in the age group of upto 25 years, between 26-40 years differ significantly with those aged above 40 years regarding Important and convenient in E-Marketing, Trust and Customer Satisfaction and Repeated Purchases.

Since P value is less than 0.05, the null hypothesis is rejected at 5 percent level of significance. Hence, concluded that there is significant difference between Age Group having more inclination towards online shopping and Factors on Retailers with regard to Perception of the future of e-marketing, Convenience, Product Value and Range and Community Involvement and Awareness and Website Security. Based on DMRT, retailers feel that respondents in all the age groups of upto 25 years, between 26-40 years and above 40 years do not differ significantly regarding Perception of the future of e-marketing. Retailers feel that respondents in the age groups of upto 25
years, between 26-40 years differ significantly with above 40 years regarding Convenience, Product Value and Range, Community Involvement and Awareness and Website Security.

Since P value is more than 0.05, the null hypothesis is accepted at 5 percent level of significance. There is no significant difference between Age Group having more inclination towards online shopping and Factors on Retailers with regard to Overcoming Online Frauds and increasing website security and Increase in E-Sales. Hence, concluded that all retailers feel that e-shoppers of all ages are worried about remedial measures and pray for strict cyber laws for increasing the activities on the internet.

**HYPOTHESIS V**

Null Hypothesis: There is no significant difference between Category of people interested in online shopping towards online shopping with respect to Factors on Retailers.
<table>
<thead>
<tr>
<th>Factors on Retailers</th>
<th>Category of people interested in online shopping</th>
<th>F value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Educated and Employed Youth</td>
<td>Professional</td>
<td>Business</td>
</tr>
<tr>
<td>Perception of the future of e-marketing</td>
<td>2.28&lt;sup&gt;ab&lt;/sup&gt; (0.80)</td>
<td>1.95&lt;sup&gt;a&lt;/sup&gt; (0.95)</td>
<td>2.18&lt;sup&gt;a&lt;/sup&gt; (0.93)</td>
</tr>
<tr>
<td>Convenience</td>
<td>24.06 (4.01)</td>
<td>22.44 (3.69)</td>
<td>23.21 (3.31)</td>
</tr>
<tr>
<td>Important and convenient in E-Marketing</td>
<td>31.60&lt;sup&gt;c&lt;/sup&gt; (1.79)</td>
<td>30.33&lt;sup&gt;ab&lt;/sup&gt; (3.70)</td>
<td>30.03&lt;sup&gt;a&lt;/sup&gt; (1.88)</td>
</tr>
<tr>
<td>Product Value and Range</td>
<td>22.70 (3.53)</td>
<td>21.47 (4.87)</td>
<td>21.74 (4.35)</td>
</tr>
<tr>
<td>Community Involvement and Awareness</td>
<td>25.24&lt;sup&gt;b&lt;/sup&gt; (0.273)</td>
<td>23.12&lt;sup&gt;a&lt;/sup&gt; (3.90)</td>
<td>23.53&lt;sup&gt;a&lt;/sup&gt; (3.13)</td>
</tr>
<tr>
<td>Website Security</td>
<td>23.47&lt;sup&gt;a&lt;/sup&gt; (3.48)</td>
<td>21.79&lt;sup&gt;a&lt;/sup&gt; (4.69)</td>
<td>21.71&lt;sup&gt;a&lt;/sup&gt; (1.92)</td>
</tr>
<tr>
<td>Overcoming Online Frauds and increasing website security</td>
<td>26.46 (2.30)</td>
<td>26.19 (2.31)</td>
<td>26.26 (2.09)</td>
</tr>
<tr>
<td>Trust</td>
<td>18.12&lt;sup&gt;c&lt;/sup&gt; (1.80)</td>
<td>17.19&lt;sup&gt;b&lt;/sup&gt; (1.94)</td>
<td>16.32&lt;sup&gt;a&lt;/sup&gt; (0.90)</td>
</tr>
<tr>
<td>Customer Satisfaction and Repeated purchases</td>
<td>21.05 (4.23)</td>
<td>21.35 (2.82)</td>
<td>21.34 (3.91)</td>
</tr>
<tr>
<td>Increase in E-Sales</td>
<td>13.39&lt;sup&gt;ab&lt;/sup&gt; (2.96)</td>
<td>13.09&lt;sup&gt;a&lt;/sup&gt; (2.26)</td>
<td>14.74&lt;sup&gt;b&lt;/sup&gt; (3.07)</td>
</tr>
</tbody>
</table>

Source: Primary Data

Note: 1. The value within bracket refers to SD
2. ** Denotes significant at 1 percent level
3. * Denotes significant at 5 percent level
4. Different alphabet between Category of people interested in online shopping denotes significance at 5 percent Level using Duncan Multiple Range Test (DMRT).

Since P value is less than 0.01, the null hypothesis is rejected at 1 percent level of significance. Hence, concluded that there is significant difference between Category of people interested in online shopping and Factors on Retailers with regard to Important
and convenient in E-Marketing, Community Involvement and Awareness and Trust. Based on DMRT, Educated and Employed youth differ significantly with Professionals and Businessmen regarding Important and convenient in E-Marketing and Community Involvement and Awareness. In Trust, Educated and Employed youth differ significantly with Professionals who differ with Businessmen but Others (Pensioner, Housewife) are not significant with remaining group of respondents.

Since P value is less than 0.05, the null hypothesis is rejected at 5 percent level of significance. Hence, concluded that there is significant difference between Category of people interested in online shopping and Factors on Retailers with regard to Perception of the future of e-marketing, Website Security and Increase in E-Sales. Based on DMRT, Others differ significantly with Professionals and Businessmen regarding Perception of the future of e-marketing while Educated and Employed youth do not differ significantly with remaining group of respondents. In Website Security, Educated and Employed youth, Professionals, Businessmen and Others do not differ significantly with each other. In Increase in E-Sales, Businessmen differ significantly with Professionals while the Educated and Employed youth and others do not differ significantly with remaining groups.

Since P value is more than 0.05, the null hypothesis is accepted at 5 percent level of significance. There is no significant difference between Category of people interested in online shopping and Factors on Retailers with regard to Convenience, Product Value and Range, Overcoming Online Frauds and increasing website security and Customer Satisfaction and Repeated Purchases. Hence, concluded that all retailers feel that all e-
shoppers belonging to various occupations agree with the advantages and necessity for stringent cyber laws to switch to e-shopping in future.

**HYPOTHESIS VI**
Null Hypothesis: There is no significant difference between Shoppers in Chennai being aware of e-marketing with respect to Factors on Retailers.

**Table 4.5.6 Student t test for significant difference between Shoppers in Chennai being aware of e-marketing with respect to Factors on Retailers**

<table>
<thead>
<tr>
<th>Factors on Retailers</th>
<th>Shoppers in Chennai being aware of e-marketing</th>
<th>t value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>Perception of the future of e-marketing</td>
<td>2.23</td>
<td>0.86</td>
<td>2.07</td>
</tr>
<tr>
<td>Convenience</td>
<td>23.57</td>
<td>4.01</td>
<td>21.71</td>
</tr>
<tr>
<td>Important and convenient in E-Marketing</td>
<td>30.93</td>
<td>2.53</td>
<td>31.29</td>
</tr>
<tr>
<td>Product Value and Range</td>
<td>22.15</td>
<td>4.39</td>
<td>22.71</td>
</tr>
<tr>
<td>Community Involvement and Awareness</td>
<td>24.33</td>
<td>3.48</td>
<td>24.07</td>
</tr>
<tr>
<td>Website Security</td>
<td>22.78</td>
<td>3.60</td>
<td>20.29</td>
</tr>
<tr>
<td>Overcoming Online Frauds and increasing website security</td>
<td>26.18</td>
<td>2.15</td>
<td>28.50</td>
</tr>
<tr>
<td>Trust</td>
<td>17.43</td>
<td>1.86</td>
<td>18.21</td>
</tr>
<tr>
<td>Customer Satisfaction and Repeated Purchases</td>
<td>21.39</td>
<td>3.76</td>
<td>19.86</td>
</tr>
<tr>
<td>Increase in E-Sales</td>
<td>13.81</td>
<td>2.83</td>
<td>11.43</td>
</tr>
</tbody>
</table>

**Source: Primary Data**
Note: ** Denotes significant at 1 percent level
* Denotes significant at 5 percent level
No star denotes not significant at 5 percent level

Since P value is less than 0.01, the null hypothesis is rejected at 1 percent level of significance. Hence, concluded that there is significant difference between Shoppers in Chennai being aware of e-marketing and Factors on Retailers. Based on Mean scores, respondents who are not aware of e-shopping, are more worried about
remedial measures to overcome online frauds. But, respondents who are aware, expect an increase in e-sales in future.

Since P value is less than 0.05, the null hypothesis is rejected at 5 percent level of significance. Hence, concluded that there is significant difference between Shoppers in Chennai being aware of e-marketing and Factors on Retailers. Based on Mean scores, respondents who are aware of e-shopping expect strengthening website security in future.

There is no significant difference between Shoppers in Chennai being aware of e-marketing and Factors on Retailers with regard to Perception of the future of e-marketing, Convenience, Important and convenient in E-Marketing, Product Value and Range, Community Involvement and Awareness, Trust and Customer Satisfaction and Repeated Purchases. Since P value is more than 0.05, the null hypothesis is accepted at 5 percent level of significance. All the Chennai shoppers are satisfied with e-marketing and its contribution to the retailing world.

**HYPOTHESIS VII**

Null Hypothesis: There is no significant difference between Physical store presence is necessary for a retailer doing online sales with respect to Factors on Retailers.
### Table 4.5.7 Student t test for significant difference between Physical store presence is necessary for a retailer doing online sales with respect to Factors on Retailers

<table>
<thead>
<tr>
<th>Factors on Retailers</th>
<th>Physical store presence is necessary for a retailer doing online sales</th>
<th>t value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>Perception of the future of e-marketing</td>
<td>2.42</td>
<td>0.79</td>
<td>1.50</td>
</tr>
<tr>
<td>Convenience</td>
<td>23.28</td>
<td>3.97</td>
<td>23.95</td>
</tr>
<tr>
<td>Important and convenient in E-Marketing</td>
<td>30.98</td>
<td>2.61</td>
<td>30.88</td>
</tr>
<tr>
<td>Product Value and Range</td>
<td>22.02</td>
<td>4.30</td>
<td>22.80</td>
</tr>
<tr>
<td>Community Involvement and Awareness</td>
<td>24.19</td>
<td>3.57</td>
<td>24.73</td>
</tr>
<tr>
<td>Website Security</td>
<td>22.86</td>
<td>3.75</td>
<td>21.63</td>
</tr>
<tr>
<td>Overcoming Online Frauds and increasing website security</td>
<td>26.21</td>
<td>2.28</td>
<td>26.90</td>
</tr>
<tr>
<td>Trust</td>
<td>17.54</td>
<td>1.88</td>
<td>17.33</td>
</tr>
<tr>
<td>Customer Satisfaction and Repeated Purchases</td>
<td>20.84</td>
<td>4.06</td>
<td>22.75</td>
</tr>
<tr>
<td>Increase in E-Sales</td>
<td>13.04</td>
<td>2.55</td>
<td>15.68</td>
</tr>
</tbody>
</table>

**Source: Primary Data**

**Note:**

** Denotes significant at 1 percent level
* Denotes significant at 5 percent level
No star denotes not significant at 5 percent level.

Since P value is less than 0.01, the null hypothesis is rejected at 1 percent level of significance. Hence, concluded that there is significant difference between Physical store presence is necessary for a retailer doing online sales and Factors on Retailers.

There is no significant difference between Physical store presence is necessary for a retailer doing online sales and Factors on Retailers with regard to Convenience, Important and convenient in E-Marketing, Product Value and Range, Community Involvement and Awareness.
Involvement and Awareness, Website security, Overcoming Online Frauds and increasing website security and Trust. Since P value is more than 0.05, the null hypothesis is accepted at 5 percent level of significance. All the Chennai shoppers have trust and feel satisfied with e-marketing irrespective of the physical presence of a store or not.

**HYPOTHESIS VIII**

Null Hypothesis: There is no association between Age Group having more inclination towards online shopping and Rating of customers regarding online services.

Table 4.5.8 Chi-square test for association between Age Group having more inclination towards online shopping and Rating of customers regarding online services

<table>
<thead>
<tr>
<th>Age Group having more inclination towards online shopping</th>
<th>Rating of customers regarding online services</th>
<th>Total</th>
<th>Chisquare Value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fair</td>
<td>Good</td>
<td>Excellent</td>
<td></td>
</tr>
<tr>
<td>Upto 25</td>
<td>4</td>
<td>30</td>
<td>11</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>(8.9%)</td>
<td>(66.7%)</td>
<td>(24.4%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[10.8%]</td>
<td>[30.7%]</td>
<td>[24.4%]</td>
<td></td>
</tr>
<tr>
<td>26-40</td>
<td>28</td>
<td>51</td>
<td>33</td>
<td>112</td>
</tr>
<tr>
<td></td>
<td>(25.0%)</td>
<td>(45.5%)</td>
<td>(29.5%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[75.7%]</td>
<td>[52.0%]</td>
<td>[73.4%]</td>
<td></td>
</tr>
<tr>
<td>Above 40</td>
<td>5</td>
<td>17</td>
<td>1</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>(21.8%)</td>
<td>(73.9%)</td>
<td>(4.3%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[13.5%]</td>
<td>[17.3%]</td>
<td>[2.2%]</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>37</td>
<td>98</td>
<td>45</td>
<td>180</td>
</tr>
</tbody>
</table>

**Source: Primary Data**

Note: 1. The value within ( ) refers to Row Percentage
2. The value within [ ] refers to Column Percentage
3. ** Denotes significant at 1 percent level

Since P value is less than 0.01, the null hypothesis is rejected at 1 percent level
of significance. Hence, concluded that there is association between Age Group having more inclination towards online shopping and Rating of customers regarding online services. Based on the row and column percentage, 30.7 percent respondents aged upto 25 years, 52.0 percent aged between 26-40 years and 17.3 percent aged above 40 years give the rating as Good regarding online services. Matured adults feel good about online marketing and its services.

**HYPOTHESIS IX**

Null Hypothesis: There is no association between Physical store presence for a retailer doing online sales and Rating of customers regarding online services

**Table 4.5.9 Chi-square test for association between Physical store presence for a retailer doing online sales and Rating of customers regarding online services**

<table>
<thead>
<tr>
<th>Physical store presence is necessary for a retailer doing online sales</th>
<th>Rating of customers regarding online services</th>
<th>Total</th>
<th>Chi-square value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fair</td>
<td>Good</td>
<td>Excellent</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>31</td>
<td>77</td>
<td>32</td>
<td>140</td>
</tr>
<tr>
<td></td>
<td>(22.1%)</td>
<td>(55.0%)</td>
<td>(22.9%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[83.8%]</td>
<td>[78.6%]</td>
<td>[71.1%]</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>6</td>
<td>21</td>
<td>13</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>(15.0%)</td>
<td>(52.5%)</td>
<td>(32.5%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[16.2%]</td>
<td>[21.4%]</td>
<td>[28.9%]</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>37</td>
<td>98</td>
<td>45</td>
<td>180</td>
</tr>
</tbody>
</table>

**Source: Primary Data**

Note: 1. The value within ( ) refers to Row Percentage
2. The value within [ ] refers to Column Percentage
3. No star denotes not significant at 5 percent level

Since P value is more than 0.05, the null hypothesis is accepted at 5 percent level of significance. Hence concluded that there is no association between Physical store
presence for a retailer doing online sales and Rating of customers regarding online services. Based on the row and column percentage, 78.6 percent respondents feel that physical store is necessary and 21.4 percent respondents feel that physical store is not necessary and they give the rating as Good regarding online services.

**HYPOTHESIS X**

Null Hypothesis: There is no significant difference between mean ranks towards Factors of Convenience.

<table>
<thead>
<tr>
<th>Factors of Convenience</th>
<th>Mean Rank</th>
<th>Chi-Square value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Convenience (24*7)</td>
<td>5.06</td>
<td>423.407</td>
<td>&lt;0.001**</td>
</tr>
<tr>
<td>Time Saving</td>
<td>3.94</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Safe &amp; Secure</td>
<td>2.88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower Prices</td>
<td>1.93</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elimination of boundaries</td>
<td>4.18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wide Product/Service options</td>
<td>3.01</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary Data

Note: ** Denotes significant at 1 percent level
Since P value is less than 0.01, the null hypothesis is rejected at 1 percent level of significance. Hence, concluded that there is significant difference between mean ranks towards Factors of Convenience. Based on mean rank Convenience-24*7 (5.06) is ranked first, followed by Elimination of boundaries (4.18), Time Saving (3.94), Wide Product / Service options (3.01), Safe & Secure (2.88) and Lower Prices (1.93) ranked as second, third, fourth, fifth and sixth correspondingly as Factors of Convenience.
HYPOTHESIS XI
Null Hypothesis: There is no significant difference between mean ranks towards Factors Important and convenient in E-Marketing.

Table 4.5.11 Friedman test for significant difference between mean ranks towards Factors Important and convenient in E-Marketing

<table>
<thead>
<tr>
<th>Factors Important convenient in E-Marketing</th>
<th>Mean Rank</th>
<th>Chi-Square value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Best Product Pricing</td>
<td>3.79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Best Product Selection, Description and Information</td>
<td>3.70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good Shipping Options</td>
<td>4.40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trusted Website Security Certificate</td>
<td>5.32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strong Customer Service Support</td>
<td>4.45</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reliable Return Policy Norms</td>
<td>3.38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ratings given by Customers</td>
<td>2.95</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary Data
Note: ** Denotes significant at 1 percent level
Since P value is less than 0.01, the null hypothesis is rejected at 1 percent level of significance. Hence, concluded that there is significant difference between mean ranks towards Factors Important and convenient in E-Marketing. Based on mean rank Trusted Website Security Certificate (5.32) is ranked first, followed by Strong Customer Service Support (4.45), Good Shipping Options (4.40), Best Product Pricing (3.79), Best Product Selection, Description and Information (3.70), Reliable Return Policy Norms (3.38), and Ratings given by Customers (2.95) ranked as second, third, fourth, fifth, sixth and seventh correspondingly as Factors Important and convenient in E-Marketing.

HYPOTHESIS XII
Null Hypothesis: There is no significant difference between mean ranks towards Factors showing Product Value and Range.
Table 4.5.12 Friedman test for significant difference between mean ranks towards Factors showing Product Value and Range

<table>
<thead>
<tr>
<th>Factors showing Product Value and Range</th>
<th>Mean Rank</th>
<th>Chi-Square value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Electronics</td>
<td>3.11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Music &amp; Books</td>
<td>3.37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Travel and Entertainment</td>
<td>4.92</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apparels &amp; Clothing</td>
<td>3.16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jewellery</td>
<td>1.54</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Value Products</td>
<td>4.90</td>
<td>517.390</td>
<td>&lt;0.001**</td>
</tr>
</tbody>
</table>

Source: Primary Data
Note: ** Denotes significant at 1 percent level

Since P value is less than 0.01, the null hypothesis is rejected at 1 percent level of significance. Hence, concluded that there is significant difference between mean ranks towards Factors showing Product Value and Range. Based on mean rank Travel and Entertainment (4.92) is ranked first, followed by Low Value Products (4.90), Music & Books (3.37), Apparels & Clothing (3.16), Consumer Electronics (3.11), and Jewellery (1.54) ranked as second, third, fourth, fifth and sixth correspondingly as Factors showing Product Value and Range.

**HYPOTHESIS XIII**

Null Hypothesis: There is no significant difference between mean ranks towards Factors Showing Community Involvement and Awareness.
Table 4.5.13 Friedman test for significant difference between mean ranks towards Factors showing Community Involvement and Awareness

<table>
<thead>
<tr>
<th>Factors showing Community Involvement and Awareness</th>
<th>Mean Rank</th>
<th>Chi-Square value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommendation by Friends</td>
<td>4.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advertisement in TV, Radio, Print &amp; Content Marketing</td>
<td>3.13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Search engine Ads</td>
<td>4.23</td>
<td>416.132</td>
<td>&lt;0.001**</td>
</tr>
<tr>
<td>Social Networking Ads (Facebook, Blog)</td>
<td>4.89</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Co-marketing(Partnering)</td>
<td>1.89</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Online Advertising (Banners, Pay per Click etc)</td>
<td>2.86</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary Data
Note: ** Denotes significant at 1 percent level

Since P value is less than 0.01, the null hypothesis is rejected at 1 percent level of significance. Hence, concluded that there is significant difference between mean ranks towards Factors showing Community Involvement and Awareness. Based on mean rank, Social Networking Ads (Facebook, Blog) (4.89) is ranked first, followed by Search engine Ads (4.23), Recommendation by Friends (4.00), Advertisement in TV, Radio, Print & Content Marketing (3.13), Online Advertising (Banners, Pay per Click etc) (2.86) and Co-marketing(Partnering) (1.89) ranked as second, third, fourth, fifth and sixth correspondingly as Factors showing Community Involvement and Awareness.

HYPOTHESIS XIV
Null Hypothesis: There is no significant difference between mean ranks towards Factors threatening website security.
Table 4.5.14 Friedman test for significant difference between mean ranks towards Factors threatening website security

<table>
<thead>
<tr>
<th>Factors threatening website security</th>
<th>Mean Rank</th>
<th>Chi-Square value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online Debit or Credit Card Fraud</td>
<td>5.25</td>
<td>414.848</td>
<td>&lt;0.001**</td>
</tr>
<tr>
<td>Paying for Goods but not receiving them</td>
<td>3.66</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phishing (Stealing Data) &amp; Hacking</td>
<td>3.84</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Password Stealing</td>
<td>3.56</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Misleading bogus advertisement</td>
<td>2.34</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wrong e-mail and contact address</td>
<td>2.35</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary Data

Note: ** Denotes significant at 1 percent level

Since P value is less than 0.01, the null hypothesis is rejected at 1 percent level of significance. Hence, concluded that there is significant difference between mean ranks towards Factors threatening website security. Based on mean rank, Online Debit or Credit Card Fraud (5.25) is ranked first, followed by Phishing (Stealing Data) & Hacking (3.84), Paying for Goods but not receiving them (3.66), Password Stealing (3.56), Wrong e-mail and contact address (2.35) and Misleading bogus advertisement (2.34) ranked as second, third, fourth, fifth and sixth correspondingly as Factors threatening website security.

HYPOTHESIS XV

Null Hypothesis: There is no significant difference between mean ranks towards Factors for Overcoming Online Frauds and increasing website security.

Table 4.5.15 Friedman test for significant difference between mean ranks towards Factors for Overcoming Online Frauds and increasing website security

<table>
<thead>
<tr>
<th>Factors for Overcoming Online Frauds and increasing website security</th>
<th>Mean Rank</th>
<th>Chi-Square value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>High penalty for cyber crime</td>
<td>4.47</td>
<td>118.294</td>
<td>&lt;0.001**</td>
</tr>
<tr>
<td>Clear cut definition of cyber laws</td>
<td>3.36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creating awareness among public and online shoppers</td>
<td>3.63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stringent punishments for cyber frauds</td>
<td>3.11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strengthening Website Design and Features</td>
<td>3.16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good Tracking Systems</td>
<td>3.28</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary Data

Note: ** Denotes significant at 1 percent level
Since P value is less than 0.01, the null hypothesis is rejected at 1 percent level of significance. Hence, concluded that there is significant difference between mean ranks towards Factors for Overcoming Online Frauds and increasing website security. Based on mean rank, High penalty for cyber crime (4.47) is ranked first, followed by Creating awareness among public and online shoppers (3.63), Clear cut definition of cyber laws (3.36), Good Tracking Systems (3.28), Strengthening Website Design and Features (3.16) and Stringent punishments for cyber frauds (3.11) ranked as second, third, fourth, fifth, sixth and seventh correspondingly as Factors for Overcoming Online Frauds and increasing website security.

**HYPOTHESIS XVI**
Null Hypothesis: There is no significant difference between mean ranks towards Factors regarding Trust building measures.

---

**Table 4.5.16 Friedman test for significant difference between mean ranks towards Factors regarding Trust building measures**

<table>
<thead>
<tr>
<th>Factors regarding Trust building measures</th>
<th>Mean Rank</th>
<th>Chi-Square value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate response to Complaints</td>
<td>3.21</td>
<td>150.460</td>
<td>&lt;0.001**</td>
</tr>
<tr>
<td>Reduce Cyber Threats</td>
<td>2.31</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Genuine Products and Discounts</td>
<td>2.06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clear Cut Return Policy Norms</td>
<td>2.43</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Source: Primary Data**
Note: ** Denotes significant at 1 percent level

Since P value is less than 0.01, the null hypothesis is rejected at 1 percent level of significance. Hence, concluded that there is significant difference between mean ranks towards Factors regarding Trust building measures. Based on mean rank, Immediate response to Complaints (3.21) is ranked first, followed by Clear Cut Return Policy Norms (2.43), Reduce Cyber Threats (2.31) and Genuine Products and Discounts...
(2.06) ranked as second, third and fourth correspondingly as Factors regarding Trust building measures.

**HYPOTHESIS XVII**
Null Hypothesis: There is no significant difference between mean ranks towards Factors on Customer Satisfaction and Repeated Purchases.

Table 4.5.17 Friedman test for significant difference between mean ranks towards Factors on Customer Satisfaction and Repeated Purchases

<table>
<thead>
<tr>
<th>Factors on Customer Satisfaction and Repeated Purchases</th>
<th>Mean Rank</th>
<th>Chi-Square value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase in e-sales volume</td>
<td>3.20</td>
<td>45.774</td>
<td>&lt;0.001**</td>
</tr>
<tr>
<td>Increase in number of customers</td>
<td>2.63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good Feedback on Social Networking Sites</td>
<td>3.32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good Rating in the website</td>
<td>2.79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repeated Purchases by existing customers</td>
<td>3.05</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Source: Primary Data**
Note: ** Denotes significant at 1 percent level
Since P value is less than 0.01, the null hypothesis is rejected at 1 percent level of significance. Hence, concluded that there is significant difference between mean ranks towards Factors on Customer Satisfaction and Repeated Purchases. Based on mean rank, Good Feedback on Social Networking Sites (3.32) is ranked first, followed by Increase in e-sales volume (3.20), Repeated Purchases by existing customers (3.05), Good Rating in the website (2.79) and Increase in number of customers (2.63) ranked as second, third, fourth and fifth correspondingly as Factors on Customer Satisfaction and Repeated Purchases.

**HYPOTHESIS XVIII**
Null Hypothesis: There is no significant difference between mean ranks towards Factors on Increase in E-Sales.
Table 4.5.18 Friedman test for significant difference between mean ranks towards Factors on Increase in E-Sales

<table>
<thead>
<tr>
<th>Factors on Increase in E-Sales</th>
<th>Mean Rank</th>
<th>Chi-Square value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online Advertising Budget</td>
<td>4.60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase in revenue on account of Website Design &amp; Web ad performance</td>
<td>4.96</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduction in Overall Marketing Costs</td>
<td>4.24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase in Online Customers</td>
<td>6.29</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase in Profits</td>
<td>3.92</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase in Market Share since inception</td>
<td>4.11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase in Overseas customers</td>
<td>3.22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase in e-sales over the period</td>
<td>4.66</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary Data
Note: ** Denotes significant at 1 percent level

Since P value is less than 0.01, the null hypothesis is rejected at 1 percent level of significance. Hence, concluded that there is significant difference between mean ranks towards Factors on Increase in E-Sales. Based on mean rank, Increase in Online Customers (6.29) is ranked first, Increase in revenue on account of Website Design & Web ad performance (4.96), Increase in e-sales over the period (4.66), Online Advertising Budget (4.60), Reduction in Overall Marketing Costs (4.24), Increase in Market Share since inception (4.11), Increase in Profits (3.92) and Increase in Overseas customers (3.22) ranked as second, third, fourth, fifth, sixth, seventh and eighth correspondingly as Factors on Increase in E-Sales.
Table 4.5.19 Pearson Correlation Coefficient between Factors on Retailers

<table>
<thead>
<tr>
<th>Factors of Retailers</th>
<th>Convenience</th>
<th>Product Value and Range</th>
<th>Community Involvement and Awareness</th>
<th>Website Security</th>
<th>Trust</th>
<th>Customer Satisfaction and Repeated Purchases</th>
<th>Increase in E-Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Convenience</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.104</td>
</tr>
<tr>
<td>Product Value and Range</td>
<td></td>
<td>0.698**</td>
<td>0.733**</td>
<td>0.379**</td>
<td>0.639**</td>
<td>0.392**</td>
<td>0.106</td>
</tr>
<tr>
<td>Community Involvement and Awareness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.133</td>
</tr>
<tr>
<td>Website Security</td>
<td>-</td>
<td>-</td>
<td>1.000</td>
<td>0.349**</td>
<td>0.681**</td>
<td>0.474**</td>
<td>0.064</td>
</tr>
<tr>
<td>Trust</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1.000</td>
<td>0.452**</td>
<td>0.237**</td>
<td>0.175*</td>
</tr>
<tr>
<td>Customer Satisfaction and Repeated Purchases</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.000</td>
<td></td>
<td>0.581**</td>
</tr>
<tr>
<td>Increase in E-Sales</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td>1.000</td>
</tr>
</tbody>
</table>

**Source: Primary Data**

Note: ** Correlation is significant at 1 percent level
* Correlation is significant at 5 percent level
No star denotes correlation not significant at 5 percent level.

The Correlation Coefficient between Convenience and Community Involvement and Awareness is 0.733 which indicate 73 percentage positive relationship between Convenience and Community Involvement and Awareness and is significant at 1 percent level. The Correlation Coefficient between Product Value and Range and Community Involvement and Awareness is 0.740 which indicate 74 percentage positive relationship between Product Value and Range and Community Involvement and Awareness and is significant at 1 percent level. The Correlation Coefficient between Community Involvement and Awareness and Trust is 0.681 which indicate 68...
percentage positive relationship between Community Involvement and Awareness and Trust and is significant at 1 percent level. The Correlation Coefficient between Website Security and Trust is 0.452 which indicate 45 percentage positive relationship between Website Security and Trust and is significant at 1 percent level.

The Correlation Coefficient between Trust and Customer Satisfaction and Repeated Purchases is 0.273 which indicate 27 percentage positive relationship between Trust and Customer Satisfaction and Repeated Purchases and is significant at 1 percent level. The Correlation Coefficient between Customer Satisfaction and Repeated Purchases and Increase in E-Sales is 0.581 which indicate 58 percentage positive relationship between Customer Satisfaction and Repeated Purchases and Increase in E-Sales and is significant at 1 percent level.

**REGRESSION ANALYSIS OF INCREASE IN E-SALES ON FACTORS ON RETAILERS**

Regression is the determination of statistical relationship between two or more variables. In simple regression two variables are used. One variable (independent) is the cause of the behaviour of another one (dependent).

In this study, the dependent variable is Increase in E-Sales and Independent variables are Convenience, Product Value and Range, Community Involvement and Awareness, Website Security, Trust and Customer Satisfaction and Repeated Purchases. They are discussed as follows:

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>:</th>
<th>Increase in E-Sales (Y)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent variables</td>
<td>:</td>
<td>1. Convenience (X1)</td>
</tr>
</tbody>
</table>

2. Product Value and Range (X2)
3. Community Involvement and Awareness (X₃)
4. Website Security (X₄)
5. Trust (X₅)
6. Customer Satisfaction and Repeated Purchases (X₆)

Multiple R value : 0.689
R Square value : 0.475
F value : 26.095
P value : <0.001**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Unstandardized co-efficient (B)</th>
<th>SE of B</th>
<th>Standardized co-efficient (β)</th>
<th>t value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>X₁</td>
<td>0.076</td>
<td>0.064</td>
<td>0.105</td>
<td>1.186</td>
<td>0.237</td>
</tr>
<tr>
<td>X₂</td>
<td>0.058</td>
<td>0.062</td>
<td>0.086</td>
<td>0.935</td>
<td>0.351</td>
</tr>
<tr>
<td>X₃</td>
<td>0.092</td>
<td>0.082</td>
<td>0.110</td>
<td>1.120</td>
<td>0.264</td>
</tr>
<tr>
<td>X₄</td>
<td>0.056</td>
<td>0.050</td>
<td>0.071</td>
<td>1.135</td>
<td>0.258</td>
</tr>
<tr>
<td>X₅</td>
<td>0.726</td>
<td>0.131</td>
<td>0.469</td>
<td>5.537</td>
<td>&lt;0.001**</td>
</tr>
<tr>
<td>X₆</td>
<td>0.477</td>
<td>0.049</td>
<td>0.641</td>
<td>9.752</td>
<td>&lt;0.001**</td>
</tr>
<tr>
<td>Constant</td>
<td>12.171</td>
<td>1.660</td>
<td>-</td>
<td>7.329</td>
<td>&lt;0.001**</td>
</tr>
</tbody>
</table>

Source: Primary Data

The multiple correlation coefficient is 0.689 measures the degree of relationship between the actual values and the predicted values of Increase in E-Sales. Because the predicted values are obtained as a linear combination of Convenience (X₁), Product
Value and Range (X_2), Community Involvement and Awareness (X_3), Website Security (X_4), Trust (X_5) and Customer Satisfaction and Repeated Purchases (X_6), the coefficient value of 0.689 indicates that the relationship between Increase in E-Sales and the six independent variables is quite strong and positive.

The Coefficient of Determination R-square measures the goodness-of-fit of the estimated Sample Regression Plane (SRP) in terms of the proportion of the variation in the dependent variables explained by the fitted sample regression equation. Thus, the value of \( R^2 \) is 0.475 simply means that about 47.5 percent of the variation in Increase in E-Sales is explained by the estimated SRP that uses Convenience, Product Value and Range, Community Involvement and Awareness, Website Security, Trust and Customer Satisfaction and Repeated Purchases as the independent variables and \( R^2 \) value is significant at 1 percent level.

The multiple regression equation is

\[
Y = 12.171 + 0.076X_1 + 0.058X_2 + 0.0902X_3 + 0.056X_4 + 0.726X_5 + 0.477X_6
\]

Here, the coefficient of \( X_5 \) (0.726), \( X_6 \) (0.477) represents the partial effect of Trust and Customer Satisfaction and Repeated Purchases on Increase in E-Sales, holding other variables as constant. The estimated positive sign implies that such effect is positive that Increase in E-Sales score would increase by 0.726 and 0.477 for every unit increase in Trust and Customer Satisfaction and Repeated Purchases respectively and this coefficient value is significant at 1 percent level.

The coefficient of \( X_1 \) (0.076), \( X_2 \) (0.058), \( X_3 \) (0.090) \( X_4 \) (0.056), represents the partial effect of Convenience, Product Value and Range, Community Involvement and
Awareness, Website Security on Increase in E-Sales, holding other variables as constant. The estimated positive sign implies that such effect is positive that Increase in E-Sales score would increase by 0.076, 0.058, 0.090 and 0.056 for every unit increase in Convenience, Product Value and Range, Community Involvement and Awareness, Website Security respectively and this coefficient value is not significant at 5 percent level.

Based on Standard Co-efficient ($\beta$), Customer Satisfaction and Repeated Purchases ($X_6$) is the most important factor in extracting Increase in E-Sales followed by Trust ($X_5$) and Community Involvement and Awareness ($X_3$).

**STRUCTURAL EQUATION MODEL ON RETAILERS**

The variables used in the structural equation model are given as follows:

I Observed, endogenous variables
   1. Customer Satisfaction and Repeated Purchases
   2. Trust
   3. Increase in E-Sales

II Observed, exogenous variables
   1. Product Range and Value
   2. Community Involvement & Awareness
   3. Convenience
   4. Website Security

III Unobserved, exogenous variables
   1. $e_1$: Error term for Trust
   2. $e_2$: Error term for Customer Satisfaction and Repeated Purchases
3. e3: Error term for Increase in E-Sales

**Number of variables in the SEM are:**

Number of variables in the model: 10  
Number of observed variables: 7  
Number of unobserved variables: 3  
Number of exogenous variables: 7  
Number of endogenous variables: 3

**Figure 4.5.21 Structural Equation Model on Retailers**

**Source: Primary Data**
Table 4.5.22 Variables in the Structural Equation Model Analysis of Retailers

<table>
<thead>
<tr>
<th>Variables</th>
<th>Unstandardised co-efficient (B)</th>
<th>S.E of B</th>
<th>Standardised co-efficient (β)</th>
<th>t value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust</td>
<td>Product Range and Value</td>
<td>0.094</td>
<td>0.034</td>
<td>0.219</td>
<td>2.798</td>
</tr>
<tr>
<td>Trust</td>
<td>Community Involvement &amp; Awareness</td>
<td>0.172</td>
<td>0.045</td>
<td>0.319</td>
<td>3.855</td>
</tr>
<tr>
<td>Trust</td>
<td>Website Security</td>
<td>0.106</td>
<td>0.027</td>
<td>0.210</td>
<td>3.895</td>
</tr>
<tr>
<td>Trust</td>
<td>Convenience</td>
<td>0.081</td>
<td>0.037</td>
<td>0.174</td>
<td>2.207</td>
</tr>
<tr>
<td>Customer Satisfaction and Repeated Purchases</td>
<td>Trust</td>
<td>0.568</td>
<td>0.150</td>
<td>0.273</td>
<td>3.794</td>
</tr>
<tr>
<td>Increase in E-Sales</td>
<td>Customer Satisfaction and Repeated Purchases</td>
<td>0.432</td>
<td>0.045</td>
<td>0.581</td>
<td>9.544</td>
</tr>
</tbody>
</table>

Source: Primary Data
Note: ** Denotes significant at 1 percent level
* Denotes significant at 5 percent level

Here, the coefficient of **Product Range and Value** is **0.094** represents the partial effect of Product Range and Value on Trust, holding Community Involvement & Awareness, Website Security, Convenience, Trust and Customer Satisfaction and Repeated Purchases as constant. The estimated positive sign implies that such effect is positive that Trust would increase by 0.094 for every unit increase in Product Range and
Value and this coefficient value is significant at 1 percent level.

The coefficient of **Community Involvement & Awareness is 0.172** represents the partial effect of Community Involvement & Awareness on Trust, holding Product Range and Value, Website Security, Convenience, Trust and Customer Satisfaction and Repeated Purchases as constant. The estimated positive sign implies that such effect is positive that Trust would increase by 0.172 for every unit increase in Community Involvement & Awareness and this coefficient value is significant at 1 percent level.

The coefficient of **Website Security is 0.106** represents the partial effect of Website Security on Trust, holding Product Range and Value, Community Involvement & Awareness, Convenience, Trust and Customer Satisfaction and Repeated Purchases as constant. The estimated positive sign implies that such effect is positive that Trust would increase by 0.106 for every unit increase in Website Security and this coefficient value is significant at 1 percent level.

The coefficient of **Convenience is 0.081** represents the partial effect of Convenience on Trust, holding Product Range and Value, Community Involvement & Awareness, Website Security, Trust and Customer Satisfaction and Repeated Purchases as constant. The estimated positive sign implies that such effect is positive that Trust would increase by 0.081 for every unit increase in Convenience and this coefficient value is significant at 5 percent level.
The coefficient of **Trust is 0.568** represents the partial effect of Trust on Customer Satisfaction & Repeated Purchases, holding Product Range and Value, Community Involvement & Awareness, Website Security, Convenience and Customer Satisfaction and Repeated Purchases as constant. The estimated positive sign implies that such effect is positive that Customer Satisfaction & Repeated Purchases would increase by 0.568 for every unit increase in Trust and this coefficient value is significant at 1 percent level.

The coefficient of **Customer Satisfaction & Repeated Purchases is 0.432** represents the partial effect of Increase in E-Sales, holding Product Range and Value, Community Involvement & Awareness, Website Security, Convenience and Trust as constant. The estimated positive sign implies that such effect is positive that Increase in E-Sales would increase by 0.432 for every unit increase in Customer Satisfaction & Repeated Purchases and this coefficient value is significant at 1 percent level.
Table 4.5.23 Model fit summary for SEM on Retailers

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
<th>Suggested Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-square value</td>
<td>12.328</td>
<td>-</td>
</tr>
<tr>
<td>P value</td>
<td>0.19</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>GFI</td>
<td>0.964</td>
<td>&gt;0.90 (Hair et al., 2006)</td>
</tr>
<tr>
<td>AGFI</td>
<td>0.940</td>
<td>&gt;0.90 (Daire et al., 2008)</td>
</tr>
<tr>
<td>CFI</td>
<td>0.971</td>
<td>&gt;0.90 (Hu and Bentler, 1999)</td>
</tr>
<tr>
<td>RMR</td>
<td>0.051</td>
<td>&lt;0.10 (Hair et al., 2006)</td>
</tr>
<tr>
<td>RMSEA</td>
<td>0.026</td>
<td>&lt;0.10 (Hair et al., 2006)</td>
</tr>
</tbody>
</table>

Source: Primary Data

Structural Equation Modeling (SEM): Model fit assessment

Structural equation modeling was used to analyze the suitability of the model based upon the collected samples. As recommended by Anderson and Gerbing (1988), measurement model to test the reliability and validity of the survey instrument was analyzed first, and by using AMOS version 16 the structural model was analyzed. The structural equation model (SEM) is most useful when assessing the causal relationship between variables as well as verifying the compatibility of the model used (Peter, 2011). Structural equation modeling evaluates whether the data fit a theoretical model. In order to evaluate the model, emphasis was given to Chi-square, CFI, GFI, AGFI, RMR and RMSEA (Table above).

As per the result, Chi square statistics with $p = 0.000$ does not show a good fit of the model. The sample used was 180 and included no missing data. This sample is adequate for the proposed number of parameters (Bentler & Chou, 1987., Schumaker and Lomax, 1996). Common model-fit measures like chi-square, the comparative fit index (CFI), root mean square error of approximation (RMSEA) were used to estimate the measurement model fit.
From the above table, it is found that the calculated P value is 0.19 which is greater than 0.05 which indicates perfectly fit. Here, GFI (Goodness of Fit Index) value and AGFI (Adjusted Goodness of Fit Index) value is greater than 0.9 which represent it is a good fit. The calculated CFI (Comparative Fit Index) value is 0.971 which means that it is a good fit. It is found that RMR (Root Mean Square Residuals) and RMSEA (Root Mean Square Error of Approximation) value is 0.051 and 0.026 respectively and they are less than 0.10 indicating that it is a perfectly fit model.

4.6 DISCRIMINANT ANALYSIS FOR RETAILERS AND CONSUMERS

Discriminant analysis is used to distinguish between retailers and respondents based on the Factors related to E-Marketing from the perspective of retailers and respondents and the most important results are presented in the following tables.

Factors related to E-Marketing from the perspective of retailers and respondents are measured using 8 statements. Based on this response from the retailers and respondents, discriminate analysis is carried out to distinguish between retailers and respondents. The tests of equality of group means measure each independent variable's potential before the model is created. Wilks' lambda, the F statistic and its significance level are presented in the following table.

<table>
<thead>
<tr>
<th>Factors related to E-Marketing</th>
<th>Wilks' Lambda</th>
<th>F value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Convenience</td>
<td>0.986</td>
<td>9.605</td>
<td>0.002**</td>
</tr>
<tr>
<td>Important and convenient in E-Marketing</td>
<td>0.994</td>
<td>4.324</td>
<td>0.038*</td>
</tr>
<tr>
<td>Product Value and Range</td>
<td>0.952</td>
<td>34.866</td>
<td>&lt;0.001**</td>
</tr>
<tr>
<td>Community Involvement and Awareness</td>
<td>0.887</td>
<td>88.816</td>
<td>&lt;0.001**</td>
</tr>
<tr>
<td>Website Security</td>
<td>0.945</td>
<td>40.685</td>
<td>&lt;0.001**</td>
</tr>
</tbody>
</table>
Overcoming Online Frauds and increasing website security  |  0.985  |  10.912  |  0.001**
Trust  |  0.993  |  4.767  |  0.029*
Customer Satisfaction and Repeated Purchases  |  0.918  |  62.604  |  <0.001**

Source: Primary Data
Note: ** Denotes significant at 1 percent level
* Denotes significant at 5 percent level

The above test displays the results of a one-way ANOVA for the independent variable using the grouping variable as the factor. According to the results in the table, since P value is less than 0.01, out of 8 variables only 6 variables in discriminant model is significant. Wilks' lambda is another measure of a variable's potential. Smaller values indicate the variable is better at discriminating between groups. The table suggests that Community Involvement and Awareness is best, followed by Customer Satisfaction and Repeated Purchases, Website Security, Product Value and Range, Overcoming Online Frauds and increasing website security, Convenience, Trust and Important and convenient in E-Marketing.

Table 4.6.2 Canonical Discriminant Function of Standardised Coefficients

<table>
<thead>
<tr>
<th>Factors related to E-Marketing</th>
<th>Function Coefficients (β)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Convenience</td>
<td>0.038</td>
</tr>
<tr>
<td>Important and convenient in E-Marketing</td>
<td>0.349</td>
</tr>
<tr>
<td>Product Value and Range</td>
<td>0.397</td>
</tr>
<tr>
<td>Community Involvement and Awareness</td>
<td>0.670</td>
</tr>
<tr>
<td>Website Security</td>
<td>0.595</td>
</tr>
<tr>
<td>Overcoming Online Frauds and increasing website security</td>
<td>0.010</td>
</tr>
<tr>
<td>Trust</td>
<td>0.050</td>
</tr>
<tr>
<td>Customer Satisfaction and Repeated Purchases</td>
<td>0.796</td>
</tr>
</tbody>
</table>

Source: Primary Data
Table 4.6.3 Canonical Discriminant Function of Unstandardised Coefficients

<table>
<thead>
<tr>
<th>Factors related to E-Marketing</th>
<th>Function Coefficients (B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Convenience</td>
<td>0.010</td>
</tr>
<tr>
<td>Important and convenient in E-Marketing</td>
<td>0.092</td>
</tr>
<tr>
<td>Product Value and Range</td>
<td>0.100</td>
</tr>
<tr>
<td>Community Involvement and Awareness</td>
<td>0.199</td>
</tr>
<tr>
<td>Website Security</td>
<td>0.167</td>
</tr>
<tr>
<td>Overcoming Online Frauds and increasing website security</td>
<td>0.004</td>
</tr>
<tr>
<td>Trust</td>
<td>0.023</td>
</tr>
<tr>
<td>Customer Satisfaction and Repeated Purchases</td>
<td>0.226</td>
</tr>
<tr>
<td>Constant</td>
<td>0.205</td>
</tr>
</tbody>
</table>

Source: Primary Data

Based on the Canonical Discriminant Function coefficient, the linear discriminant equation can be written as:

\[ Y = 0.205 + 0.010X_1 + 0.092X_2 + 0.100X_3 + 0.199X_4 + 0.167X_5 + 0.004X_6 + 0.023X_7 + 0.226X_8 \]

Table 4.6.4 Discriminant Analysis Classification Results

<table>
<thead>
<tr>
<th>Original Group</th>
<th>Predicted Group Membership</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Retailer</td>
<td></td>
</tr>
<tr>
<td>Retailer</td>
<td>154 (85.6)</td>
<td>180</td>
</tr>
<tr>
<td>Consumer</td>
<td>94 (18.1)</td>
<td>520</td>
</tr>
</tbody>
</table>

Source: Primary Data

Note: 1. 83.7 percent of original grouped cases correctly classified
2. The value within bracket refers to row percentage.

The classification table shows the practical results of using the discriminant model. Of the cases used to create the model, 154 of the 180 Retailer Factors related to E-Marketing (85.6 percent) are classified correctly. 426 of the 520 Consumer Factors related to E-Marketing (81.9 percent) are classified correctly.
Marketing (81.9 percent) are classified correctly. Overall, 83.7 percent of the cases are classified correctly based on their reliability for increasing the sales.