CHAPTER 6

DATA ANALYSIS AND INTERPRETATION

EXECUTIVE SUMMARY

This chapter of the study is segmented into two broad heads. The first head highlights the major findings of descriptive statistics and the second head throws a light on the major findings of statistical analysis.

6.1 GENERAL FINDINGS

In Banking

In Demographical analysis, the Gender wise classification, both Male and Female respondents are near to equal, i.e., 55.7% and 44.3% respectively. In Age group also maintain equal importance, i.e., Upto 25 years are 26.51%, 26-35 years are 27.18%, 21.48% are 36-45 years and 24.83% are Above 45 years. In educational qualification, Under Graduate (32.51%) and Post graduate (30.54%) are more comparatively other levels. In Occupational classification, Government Employees (26.71%) and Private Employees (25.17%) are more compared with others category. In the Income-wise classification, first Above Rs.45,000 per month (25.50%) followed by Rs.35,001 to Rs.45,000 (20.81) category. In Marital status point of view, Married category (66.11%) is high compare with Un-married (33.89%) respondents. In the family system, 61.75 % are Nuclear family and the balance 38.25% is under Joint-family system (Table 5.1).
From the above, the respondents are selected with well categorized in all the factors.

In Life Insurance

In Demographical analysis, the Gender wise classification, both Male and Female respondents are near to equal, i.e., 51.4% and 48.6% respectively. In Age group also maintain equal importance, i.e., Upto 25 years are 27.2%, 26-35 years are 25.9%, 21.4% are 36-45 years and 25.5% are Above 45 years. In educational qualification, Under Graduates (31.3%) and Post Graduates (29.3%) are more comparatively other levels. In Occupational classification, Government Employees (26.5%) and Private Employees (24.8%) are more compared with others category. In the Income-wise classification, first Above Rs.45,000 per month (24.5%) followed by Rs.35,001 to Rs.45,000 (22.8%) category. In Marital status point of view, Married category (69.4%) is high compare with Un-married (30.6%) respondents. In the family system, 65.3% are Nuclear family and the balance 34.7% is under Joint-family system (Table 5.31).

From the above, the respondents are selected with well categorized in all the factors.

In Mutual Funds

In Demographical analysis, the Gender wise classification, Male respondents are high (57.4%) compare with Female respondents (42.6%). In Age group classification Upto 25 years are 30.7% followed by 26-35 years are 25.7% and 24.7% are Above 45 years. In educational qualification, Under Graduates (32.4%) and Post Graduates (29.1%) are more comparatively other levels. In Occupational classification, Government Employees (25.0%) and Private Employees (23.0%) are more compared with others category. In the
Income-wise classification, first Rs.15,001 to Rs.25,000 per month (24.3%) followed by Above Rs.45,000 (23.6%) per month and 23.0% in Rs.35,001 to Rs.45,000 category. In Marital status point of view, Married category (69.9%) is high compare with Un-married (30.1%) respondents. In the family system, 66.9% are Nuclear family and the balance 33.1% is under Joint-family system (Table 5.63).

From the above, the respondents are selected with well categorized in all the factors.

6.2 FINDINGS OF STATISTICAL ANALYSIS

1) An internal consistency analysis of measurement scales was performed separately using the SPSS Statistics 17.0 for each concept variable as well as for the complete construct using Cronbach’s alpha.

In Banking

The reliability coefficients ranged from 0.871 to 0.952 for Trust factor, 0.905 to 0.961 for Employees factor, 0.780 to 0.946 for Communication factor, 0.892 to 0.949 for Security factor, 0.894 to 0.944 for Customer focus factor, 0.835 to 0.964 for Service Level factor and 0.870 to 0.954 for Customer’s word of mouth factor (Table 5.3).

In Life Insurance

The reliability coefficients ranged from 0.869 to 0.944 for Trust factor, 0.841 to 0.955 for Employees factor, 0.878 to 0.966 for Communication factor, 0.968 to 0.991 for Security factor, 0.921 to 0.930 for Customer focus factor, 0.947 to 0.981 for Customer Prestige factor, 0.870 to
0.973 for Service Level factor and 0.920 to 0.978 for Customer’s word of mouth factor (Table 5.33).

In Mutual Funds

The reliability coefficients ranged from 0.873 to 0.947 for Trust factor, 0.930 to 0.970 for Employees factor, 0.965 to 0.971 for Communication factor, 0.962 to 0.981 for Security factor, 0.922 to 0.931 for Customer focus factor, 0.857 to 0.950 for Customer Prestige factor, 0.730 to 0.911 for Service Level factor and 0.885 to 0.916 for Customer’s word of mouth factor (Table 5.65).

The recommended minimum Cronbach’s alpha coefficient reliability of 0.70 (Nunnally 1978) was used to test the reliabilities of each factor. The reliability test was highly satisfied as the reliability coefficients are higher than the threshold 0.70. Thus, the concept variables and research constructs with the alpha value of more than 0.70 shows an adequate level of reliability (Table 5.3, 5.33 and 5.65).

2) For the complete construct variables using Confirmatory Factor Analysis, measures factor variables are appropriate for the data for the justification of the single component extraction.

In Banking

According to the results in Table 5.2, the construct validity for all research constructs can be well justified. Each set of concept variables provides only one factor with eigenvalue greater than one. This justifies that each set of variables mainly belongs to one latent factor. The range between 82% - 88% of the variance is covered from this extract single factor for all
the constructs. The KMO statistics, which are greater than 0.5, indicate the sampling adequacy under each construct, while the test statistics in Bartlett’s Test of Sphericity provide enough evidence at 1% significant level that the correlation matrix of concept variables in each construct is not identical. Therefore, the factor analysis is appropriate for the data for the justification of the single component extraction.

**In Life Insurance**

According to the results in Table 5.32, each set of concept variables provides only one factor with eigenvalue greater than one. This justifies that each set of variables mainly belongs to one latent factor. The range between 82% - 95% of the variance is covered from this extract single factor for all the constructs. The KMO statistics, which are greater than 0.5, indicate the sampling adequacy under each construct, while the test statistics in Bartlett’s Test of Sphericity provide enough evidence at 1% significant level that the correlation matrix of concept variables in each construct is not identical. Therefore, the factor analysis is appropriate for the data for the justification of the single component extraction.

**In Mutual Funds**

According to the results in Table 5.64, each set of concept variables provides only one factor with eigenvalue greater than one. This justifies that each set of variables mainly belongs to one latent factor. The range between 72% - 95% of the variance is covered from this extract single factor for all the constructs. The KMO statistics, which are greater than 0.5, indicate the sampling adequacy under each construct, while the test statistics in Bartlett’s Test of Sphericity provide enough evidence at 1% significant level that the correlation matrix of concept variables in each construct is not identical.
Therefore, the factor analysis is appropriate for the data for the justification of the single component extraction.

3) **Chi-square test** was applied to find the significant relationship between Customer Loyalty and the demographic factors of the respondents was conducted to test the first hypothesis ($H_1$).

**In Banking**

In Table 5.4 denote that the p value (sig.) for the independent variables ‘Gender’ is 0.01, ‘Age group’ is 0.01, ‘Educational Qualification’ is 0.00, ‘Occupation’ is 0.01, ‘Monthly Income’ is 0.00, ‘Marital status’ is 0.00, ‘Type of family’ is 0.00 which are less than the significance level $\alpha = 0.01$. This means that there is sufficient evidence to reject the null hypothesis, i.e., the significant relationship between Customer Loyalty and the Demographic factors.

**In Life Insurance**

In Table 5.34 denote that the p value (sig.) for the independent variables ‘Gender’ is 0.008, ‘Educational Qualification’ is 0.00, ‘Occupation’ is 0.00, ‘Monthly Income’ is 0.00, which are less than the significance level $\alpha = 0.01$ and ‘Age group’ is 0.014, ‘Marital status’ is 0.050, ‘Type of family’ is 0.018 which are less than the significance level $\alpha = 0.05$. This means that there is sufficient evidence to reject the null hypothesis, i.e., the significant relationship between Customer Loyalty and Demographic factors.

**In Mutual Funds**

In Table 5.66 denote that the p value (sig.) for the independent variables ‘Educational Qualification’ is 0.00, ‘Monthly Income’ is 0.00,
which are less than the significance level $\alpha = 0.01$ and ‘Gender’ is 0.030, ‘Age group’ is 0.023, ‘Occupation’ is 0.014, ‘Marital status’ is 0.011, ‘Type of family’ is 0.025 which are less than the significance level $\alpha = 0.05$. This means that there is sufficient evidence to reject the null hypothesis, i.e., the significant relationship between Customer Loyalty and Demographic factors.

4) **One way ANOVA** technique was applied to find the significant differences among demographical profile of the respondents attributed to build Customer loyalty, to compare the differences or similarities between Customer loyalty (Dependent variable) and demographic profile (Independent variables) of the respondents.

In **Banking, Life Insurance and Mutual funds**, the mean value of each demographic variables are above 3.00, (i.e., above the mid value). There is a sufficient evidence to reject the null hypothesis at 1% level of significance, i.e., the significant value of Demographic profile denotes that the Gender group, Age group, Occupation, Educational Qualification, Monthly Income and Marital status and the Type of family attributed to chance to build Customer loyalty in all the sectors (Table 5.5, 5.35 and 5.67).

5) **One-way Anova** technique was applied to find the significant differences among demographical profile (Independent variables) of the respondents attributed to build Customer Relationship Marketing Strategies (Dependent variable).

In **Banking**, the significant difference between the demographic variables and the implementation of CRMS, i.e., Trust, Employees, Communication, Security, Customer focus, Service Level and Customer’s Word of Mouth factors. There is a sufficient evidence to reject the null hypothesis at 5% and 1% level of significance, i.e., the significant value of
Demographic profile denotes that the Gender group, Age group, Occupation, Educational Qualification, Monthly Income, Marital status, Type of family attributed to contribute to frame CRMS, i.e., Trust, Employees, Communication, Security, Customer focus, Service Level and Customer’s Word of Mouth factors (Table 5.6, 5.8, 5.10, 5.12, 5.14, 5.16, 5.18).

In Life Insurance, the significant difference between the demographic variables and the implementation of CRMS, i.e., Trust, Employees, Communication, Security, Customer focus, Customer Prestige, Service Level and Customer’s Word of Mouth factors. There is a sufficient evidence to reject the null hypothesis at 5% and 1% level of significance, i.e., the significant value of Demographic profile denotes that the Gender group, Age group, Occupation, Educational Qualification, Monthly Income, Marital status, Type of family attributed to contribute to frame CRMS, i.e., Trust, Employees, Communication, Security, Customer Focus, Customer Prestige, Service Level and Customer’s Word of Mouth factors (Table 5.36, 5.38, 5.40, 5.42, 5.44, 5.46, 5.48, 5.50).

In Mutual funds, the significant difference between the demographic variables and the implementation of CRMS, i.e., Trust, Employees, Communication, Security, Customer focus, Customer Prestige, Service Level and Customer’s Word of Mouth factors. There is a sufficient evidence to reject the null hypothesis at 5% and 1% level of significance, i.e., the significant value of Demographic profile denotes that the Gender group, Age group, Occupation, Educational Qualification, Monthly Income, Marital status, Type of family attributed to contribute to frame CRMS, i.e., Trust, Employees, Communication, Security, Customer Focus, Customer Prestige, Service Level and Customer’s Word of Mouth factors (Table 5.68, 5.70, 5.72, 5.74, 5.76, 5.78, 5.80, 5.82).
6) **One-way Anova** technique was applied to find the significance of difference between the Customer loyalty (Dependent variable) and Customer Relationship factor attributes (Independent variable) influence in the framing of CRMS.

In **Banking**, the mean value of each factor attributes are above the mid value (i.e., above 3.00). The p value for all the independent variables was less than the significance level 0.001 (p<0.000). The significant value of the Trust, Employees, Communication, Security, Customer Focus, Service Level and Customer’s Word of Mouth factors attributes to build Customer loyalty. So, the Banks must consider the factor attributes at the time of framing the CRMS (Table 5.7, 5.9, 5.11, 5.13, 5.15, 5.17, 5.19).

In **Life Insurance**, the mean value of each factor attributes are above the mid value (i.e., above 3.00). The p value for all the independent variables was less than the significance level 0.001 (p<0.000). The significant value of the Trust, Employees, Communication, Security, Customer Focus, Customer Prestige, Service Level and Customer’s Word of Mouth factors attributes to build Customer loyalty. So, the Life Insurance companies must consider the factor attributes at the time of framing the CRMS (Table 5.37, 5.39, 5.41, 5.43, 5.45, 5.47, 5.49, 5.51).

In **Mutual funds**, the mean value of each factor attributes are above the mid value (i.e., above 3.00). The p value for all the independent variables was less than the significance level 0.001 (p<0.000). The significant value of the Trust, Employees, Communication, Security, Customer Focus, Customer Prestige, Service Level and Customer’s Word of Mouth factors attributes to build Customer loyalty. So, the Mutual fund companies must consider the factor attributes at the time of framing the CRMS (Table 5.69, 5.71, 5.73, 5.75, 5.77, 5.79, 5.81, 5.83).
7) Seven **Multiple regressions** were performed to test the hypothesis $H_3$. In Banking sector, the first regression analysis was carried out with the Trust, Employees, Communication, Security, Customer focus, Service Level and Customer’s word of Mouth as independent variables and the impact of Customer Loyalty as dependent variable. The results of first regression analysis denote that the seven variables influence the Customer Loyalty. Further, positive sign of $\beta$ values shows that there is a significant positive relationship between Customer Loyalty and the CRMS, i.e., Trust, Employees, Communication, Security, Customer focus, Service Level and Customer’s word of Mouth (Tables 5.20 to 5.22).

In Life Insurance sector, eight Multiple regressions were performed to test the hypothesis $H_3$. The second regression analysis was carried out with the Trust, Employees, Communication, Security, Customer focus, Customer Prestige, Service Level and Customer’s word of Mouth as independent variables and the impact of Customer Loyalty as dependent variable. The results of first regression analysis denote that the eight variables influence the Customer Loyalty. Further, positive sign of $\beta$ values shows that there is a significant positive relationship between Customer Loyalty and the CRMS, i.e., Trust, Employees, Communication, Security, Customer focus, Customer Prestige, Service Level and Customer’s word of Mouth (Tables 5.52 to 5.54).

In Mutual fund sector, eight Multiple regressions were performed to test the hypothesis $H_3$. The third regression analysis was carried out with the Trust, Employees, Communication, Security, Customer focus, Customer Prestige, Service Level and Customer’s word of Mouth as independent variables and the impact of Customer Loyalty as dependent variable. The results of third regression analysis denote that the eight variables influence the
Customer Loyalty. Further, positive sign of $\beta$ values shows that there is a significant positive relationship between Customer Loyalty and the CRMS, i.e., Trust, Employees, Communication, Security, Customer focus, Customer Prestige, Service Level and Customer’s word of Mouth (Tables 5.84 to 5.86).

8) **Discriminant Analysis** technique was applied to compare the Public and Private sector Customer Relationship Marketing strategies offered by Banks, Life Insurance, Mutual funds to test the hypothesis $H_4$.

**In Banking**, the Public sector Banks mean value is less than the Private sector banks in all the factors. Higher the eigenvalue (i.e., $>1$) is desirable in discriminant function, the eigen value is $1.822^a$. From canonical correlation, 64.50% of the variance in the discriminating model between Public and Private is due to the changes in the eight predictor variables. The one-way ANOVA a significant difference in the mean exists for all the factor variables p value is less than 0.01 (the p value is 0.00) exists between Public and Private Banks. All the Private sector CRMS factors Co-efficient values are higher than the Public sector Banks. As per Classification Function Coefficients (Fisher's linear discriminant functions) all Private sector factor variables scored high comparatively Public sector banks. From the analysis, the Private sector Banks continuously identify the Customer attitude and to frame CRMS compare with Public sector Banks (Tables 5.23 to 5.30).

**In Life Insurance**, the Public sector Insurance Company mean value is higher than the Private sector Insurance companies in all the factors. The eigen value is $2.185^a$. From canonical correlation, 68.5% of the variance in the discriminating model between Public and Private is due to the changes in the eight predictor variables. The one-way ANOVA a significant difference in the mean exists for all the factor variables p value is less than 0.01 (the p value is 0.00) exists between Public and Private Insurance Companies. All
the Public sector CRMS factors Co-efficient values are higher than the Private sector Life Insurance companies. As per Classification Function Coefficients (Fisher's linear discriminant functions) all Private sector factor variables scored high comparatively Public sector Life Insurance Companies. From the analysis, the Public sector Life Insurance Company continuously identified the Customer attitude and to frame CRMS compare with Private sector Life Insurance Companies (Tables 5.55 to 5.62).

In Mutual funds, the Public sector Mutual funds mean value is less than the Private sector Mutual funds in all the factors. Higher the eigenvalue (i.e., > 1) is desirable in discriminant function, the eigen value is 2.146\(^a\). From canonical correlation, 68.30\% of the variance in the discriminating model between Public and Private is due to the changes in the eight predictor variables. The one-way ANOVA a significant difference in the mean exists for all the factor variables p value is less than 0.01 (the p value is 0.00) exists between Public and Private Mutual funds. All the Private sector CRMS factors Co-efficient values are higher than the Public sector Mutual funds. As per Classification Function Coefficients (Fisher's linear discriminant functions) all Private sector factor variables scored high comparatively Public sector Mutual funds. From the analysis, the Private sector Mutual funds continuously identify the Customer attitude and to frame CRMS compare with Public sector Mutual funds (Table 5.87 to 5.94).