CHAPTER 6

SUMMARY, CONCLUSION AND RECOMMENDATIONS

During the last two decades, information technology has assumed an extensively accepted platform for smooth conduct of shopping, banking, travelling, retailing, etc. In the present-day economic scenario, long distances are not a major concern because service industries can communicate with their customers across the continents with just a click of mouse and provide 24X7 services in varied time zones. Indeed, the world has shrunk into a global village. For this reason, companies need to set the protocols for promoting effective relations with global as well as their domestic customers.

Information technology has not merely evolved, it has revolutionised our lives too. LPG (1991) reforms have brought about many revolutionary transformations in the Indian economy, especially in the banking industry. The advancements in Information Technology have indeed brought about various significant transformations in the banking industry, one of which is the advent of e-CRM (electronic Customer Relationship Management). E-CRM technology is conducive in creating an effective relationship between suppliers (banks) and their customers over the digital world. However, managing long-term customer relations is not that easy for the e-commerce service industry in this cut-throat competition.

Banking industry is one of the service industries that has faced serious challenges of liberalisation, globalisation and privatisation. The role of banks today is that of ‘financial service provider’. In the era of increased competition, in order to prosper it is imperative for the banks to focus on developing long-term relationships with their customers. The existence of IT and web-centric solutions has reshaped the CRM prospect in the form of e-CRM. To achieve this, banks are widely employing e-CRM solutions in a way that they get a competitive edge over rival banks. Moreover, effectively using e-CRM practices can help banks in gaining cost advantage and enhancing customer retention rate. The key focus of the electronic customer relationship management is to improve an effective service quality delivery and to build a healthy rapport with the customers, so as to retain the existing patrons and to win over the new ones. Though various e-CRM tools and techniques have similar merits and demerits, yet
their nature of implementation and usage may be quite different. Customers might possess awareness about the availability of e-banking facilities, but whether they actually adopt or use those e-banking facilities, needs to be checked. Another very important question is that how and to what extent the e-CRM technology actually improves customers’ relations with their banks and contributes to the latter’s growth and profitability. Various researchers have determined the relationship among the various antecedents of e-CRM with e-satisfaction, e-trust and e-loyalty and few of them have also analysed the impact on e-WOM through the mediating effect of e-satisfaction, or e-trust or e-loyalty [Mohd Khalaf (2011); Mohsin and Aftab (2013); Al-Jader et al. (2015)]. However, there lacks a comprehensive model covering the interrelationship between all these constructs together. Also earlier studies have already determined the relationship between competitive advantage and organisation’s performance in the marketing scenario [Islam et al. (2012) Azila and Noor (2011) Majeed (2011) Ismail et al. (2010) Lia et al. (2004)]. But, a very few studies have checked the relationship between e-CRM competitive advantage and e-CRM performance, especially in the banks in India. Apart from this, no known research has checked the psychometric properties of these measurement instruments, especially in the Indian context. Thus the main rationale of the present research is to bridge the gaps existing in the literature by gaining more insights into the ways by which e-CRM practices can add to the success of the banks and also give leverage to bankers in stimulating satisfaction, trust, loyalty and positive WOM among their customers.

### 6.1 Objectives of the Study

The major objective of this research is to determine the relationship between the antecedents and the consequences of e-CRM. In addition, the present endeavour is to focus on the e-CRM competitive advantage attained through e-CRM tools and techniques that ultimately leads to improved e-CRM performance in the banks in India. The objectives have been formed as below:

#### Bank Customers’ Perspective

1. To identify the e-CRM techniques being implemented in banks and to determine the extent of usage of these techniques among bank customers.
2. To develop, refine, and psychometrically evaluate the multi-dimensional scale of the antecedents of e-CRM in banks in India.

3. To determine the mediation effect between the antecedents and the consequentials (e-satisfaction, e-trust, e-loyalty, and e-WOM) of e-CRM

**Bank Managers’ Perspective**

1. To confirm and validate the proposed model of e-CRM competitive advantage and e-CRM performance of banks and gauge the relationship between these constructs.

2. To examine and compare the success of e-CRM practices in public sector and private sector banks in India using the Balance Scorecard (BSC) approach.

6.2 **Data Base and Research Methodology**

This study is based on both primary and secondary sources. The primary sources have been used for framing questionnaires. Apart from this, secondary sources have also been used for the purpose of identifying the sample design and its size. For the execution of this study, the well-structured questionnaires have been framed for both the category of respondents i.e. the bank customers and the bank managers.

6.2.1 **Universe of the Study**

The universe of this study consists of the public sector and the private sector banks within the region of the Northern India i.e., Delhi NCT (Metropolitan City) and Chandigarh (Cosmopolitan City) based on their total internet users as per the Census 2011. These two areas have been selected for survey on the basis of their total usage of internet, as per the census (2011) in India.

6.2.2 **Sample and Sampling Design**

The banks have been selected on the basis of the survey conducted by KPMG (Klynveld Peat Marwick Goerdeler), 2013 that was published in the Business Today. KPMG survey categorized banking industry into the public sector banks, the private sector banks and the foreign banks based on their size, growth and strength. Further, the categorization divided them into large-sized, mid-sized, small-sized and very small-
sized banks. For the purpose of this study, sample framework included the large and the mid-sized banks, because at the pre-testing stage, it was perceived that these banks are very active in using e-CRM technologies. The first 10 public sector banks and the first 6 private sector banks have been selected for the present study accounting for almost 50% of the banks as given in KPMG survey 2013.

At the initial stage, in order to pre-test the questionnaire, the data was collected from the 290 bank customers. For final customer survey, 545 customers have been approached on the basis of application of stratified sampling technique, who have been using the self-service technologies frequently.

In order to pre-test the second questionnaire, 175 bank managers were considered. For bankers’ survey, 275 branch managers (CRM’s manager, e-CRM’s manager and bank manager) have been approached from the main branches of the selected banks through purposive sampling technique.

### 6.2.3 Measurement Instrument

For this study, the two questionnaires have been framed, one for bank customers and other for the bank managers. The first questionnaire has been formed for gauging the bank customers’ perception towards the quality measures of e-CRM solutions and their outcomes. The components of the antecedents and the consequentials (e-satisfaction, e-trust, e-loyalty and e-WOM) of e-CRM have been measured based on 7-point Likert scale for measuring the degree of the agreement or disagreement.

The second questionnaire has been outlined for assessing the perception of bank managers regarding the effectiveness of e-CRM practices. The perception of the bank managers have been measured based on the 5-point Likert scale ranging from the degree of very important and very unimportant.

Data has been analysed using various different statistical techniques namely, Descriptive Analysis, Independent sample t-test, Exploratory Factor Analysis, Confirmatory Factor Analysis, Common Variance Method (Harman-Single Factor test and Common Latent Factor), Invariance Test, Path Analysis, Sequential Multiple Mediation Method (PROCESS).
6.3 **Key Findings**

The major findings have been given as per the objectives of this study, in the following sub-sections

6.3.1 **Identifying e-CRM Techniques and Assessing its Extent of Usage: Bank Customers’ Approach**

Varied tools and techniques of e-CRM (electronic customer relationship management) have been identified that are offered by the banks to their targeted customers. The scope of this study includes different e-CRM tools as are: Internet Banking, ATM’s (Automated Teller Machine), Debit/Credit Cards, Mobile banking, Tele Banking, Home banking, KIOSK, etc. Descriptive analysis technique has been applied for determining the level of usage towards these various e-CRM tools among the bank customers in India. The findings reveal that ATM facility has emerged as the most important and the most frequently used e-banking facility with the mean score of 4.32 trailed by debit card (3.94), credit card (3.37), net banking (3.34), mobile banking (3.22), tele banking (2.26), home banking (2.12), and KIOSK (1.92). The reason for ATM as being the most preferred facility is that it provides varied useful services to the customers, like withdrawing money, checking bank balance, taking out a print of mini statement, changing ATM pin code, etc. Although ATM has been found to be most extensively used by the bank customers, yet all the other e-CRM tools are no less important, because all these e-CRM facilities significantly contribute towards enhancing the customer involvement in the banks, leading to the banks’ growth.

6.3.2 **Development, Refinement, and Psychometric Evaluation of Antecedent of e-CRM Scale: Bank Customers’ Approach**

In order to explore the constructs of the antecedents of e-CRM scale in the banks in India, EFA and CFA techniques have been applied. At the initial stage, a research instrument has been framed by using the pool of 57 statements from different referred sources. Out of 57 items, 31 statements have been deleted through the process of pilot study. Finally, 26 items have been left for conducting the final analysis. Reliability of all the constructs have also been checked and it meet the threshold value i.e. greater than 0.7. After that, Exploratory Factor Analysis technique has been employed on the
variables to check the uni-dimensionality of the constructs and further CFA has been used to confirm and validate the scale in the Indian context. The application of Exploratory Factor Analysis on the scale resulted in a six-factor solution with twenty-six items. The constructs framed are Information Quality and Usability, Reliability, Security and Privacy, Efficiency, System Availability, and Assurance.

In addition, Confirmatory Factor Analysis using maximum likelihood estimation method has been employed to determine the internal reliability and validity. It has been proved that six-factor model can be ascertained by comparing the theoretical measurement model with real data as represented by this study. Further, the antecedents of e-CRM scale has been validated through the psychometric properties such as construct reliability, average variance extracted, and discriminant validity. Psychometrically, this measurement instrument is internally consistent, reliable, valid, and applicable in the Indian banking scenario, as all the values of all these properties have been meeting their threshold value (Hair et al., 2009).

Thereafter, invariance test has been conducted to check the cross-validity of the present measurement model. It has been proved that this scale is invariant from one sample to another and has established the robustness of the scale across the two samples (Chandigarh and Delhi NCT).

In addition, in order to check the presence of biasness in the dataset, two methodologies have been utilised including Harman-Single factor test and Common latent factor. The results established that there is no biasness in the responses of the present measurement model. To conclude, this developed and validated scale is favourable for assessing the customer experience about the effective delivery of the quality of e-CRM practices so as to meet the bank customers’ expectations in India.

6.2.3 Mediating Role between Antecedents and Consequences of e-CRM: Bank Customers’ Perspective

This section deals with to determine the mediating effect between the antecedents and the consequentials (e-satisfaction, e-trust, e-loyalty, and e-WOM) of e-CRM. Sequential multiple mediation analysis technique has been applied for checking the direct and indirect effects of the proposed measurement model. The results have
revealed that the measurement model has been psychometrically valid. It has also been found that a partial mediation does exist in the present measurement model. The results have also indicated that the relationship between the antecedents and the consequentials (e-satisfaction, e-trust, e-loyalty and e-WOM) of e-CRM has been found to be statistically positive and significant. Although the relationship between the e-loyalty and e-WOM has found to be statistically insignificant, yet the relationship between them is positive. After measuring the relationship among all the constructs of the proposed measurement model, the next step has been to check the indirect effects and direct effect among all these constructs. The bootstrapping method, through the sequential multiple mediation analysis, represents eight total effects including seven indirect effects and one direct effect. Out of seven indirect effects, three are positively significant, because the bootstrap confidence interval, in this pathway is entirely above zero. Further, it has been found though some of the indirect effects are equal to zero, yet the total indirect effect of this model does not straddle zero. It means that in overall model, all the mediating constructs influence one another leading to the existence of a partial mediation in the measurement model.

To conclude, a good quality in service delivery by a bank goes a long way in winning the satisfaction, trust and loyalty of the customer, leading to the dissemination of a positive word of mouth message, which ultimately serves as a free publicity for the bank and promotes its business.

6.3.4 Competitive Advantage and Performance of e-CRM: Bankers’ Approach

In this section, findings demonstrate that there exists a positive relationship between competitive advantage and performance of e-CRM in the banks in India. Confirmatory factor analysis technique has been applied on the latent constructs of the measurement model. Psychometrically, this model has been tested to be internally consistent, reliable and valid in the banks in India. Besides this, structural equation modeling has been used for examining the influence of e-CRM competitive advantage on e-CRM performance (non-financial and financial performance). It has been found that competitive advantage leads to significant impact on all the perspectives of e-CRM performance, using BSC (Balance Scorecard) approach. From the results, in the first
path, it has been established that customer perspective has been highly explained by the competitive advantage, having 46.2 percent variance at 0.01 level of significance. In the second path, internal business perspective has been explained by e-CRM competitive advantage with 36.4 percent of variance at 0.01 level. In the next path, e-CRM competitive advantage has explained financial perspective of e-CRM, with the variance of 35.4 percent and it has found to be positively significant at 0.01 level. In the last path of the model, it has been found that innovation and learning perspective has been explained by competitive advantage with the 13.8 percent variance and shown positively significant at the 0.05 level for the public sector and the private sector banks. Hence it can be suggested that e-CRM competitive advantage has a positive influence on the e-CRM success level as a performance indicator in banks in India.

6.3.5 Comparison of the Success of e-CRM Performance between Public Sector and Private Sector Banks

In order to study the differentiation between public sector and private sector banks with respect to e-CRM performance perspectives (customer perspective, internal business perspective, innovation and learning perspective, and financial perspective), independent sample t-test has been applied. Initially, dimension-wise analysis has been conducted and it depicted that both the sectors significantly differ solely with respect to financial perspective (0.008) at the 0.001 level. Further, metric-wise analysis has been done to determine whether there is any significant difference in various metrics of the four perspectives of e-CRM performance on the sectorial basis. These results depicted that two out of eight variables of customer perspective [CP1 (0.04) and CP4 (0.02)] have shown significant points of difference at the 0.05 level. In case of internal business perspective, only one of the items out of seven [IBP8 (0.04)] has shown a significant difference at the 0.05 level. Further, the results of innovation and learning perspective shows that INP1 (0.03) has found to be significantly different at the level of 0.05. Lastly, FP2 (0.01), FP3 (0.12), and FP3 (0.005) have produced significant difference at the 0.05 and 0.001 respectively. To conclude, it has been realised that four pillars of e-CRM (customer perspective, internal business perspective, innovation and learning perspective, and financial perspective), through BSC approach, may highly contribute towards the successful implementation of e-CRM in the banking sector in India. It has
also been found that the public sector and private sector banks differ significantly on most of the metrics of the four dimensions of e-CRM performance based on the sectorial comparison. This implies that both banks segments vary substantially in reaping the benefits of BSC strategies for improving e-CRM performance in their respective banks.

6.4 Recommendations and Implications of the Study

It is pertinent for marketing and bank managers to understand where they should focus their attention while implementing e-CRM solutions. Based on the findings of the research, the following recommendations are made to the e-CRM managers/bank practitioners:

1. E-banking facilities have turned banks into a pathway for success of the economy. The results of the study have reflected that ATM has been found to be the most extensively used e-facility as compared to other e-facilities. As such, managers should pay attention to make these facilities more user-friendly as ATM, and should organize awareness campaigns in different places for increasing the number of users of these self-service technologies. It is recommended that the banks should offer the right service to right set of customers; this may lead to better customer relationship management in the banks in our country. Besides this, the banks are suggested to improve and enhance the geographical coverage of their e-banking facilities.

2. This present study developed and validated a scale (Antecedents of e-CRM) that has potential applications for the marketing practitioners and the bankers as well. The marketing/bank manager may use this scale for investigating the extent of quality level of the e-banking facilities and determining the needs of the existing as well as the new customers. This study outlines the various attributes that should be considered by the bankers while offering the e-banking services. The findings reveal that information quality and usability are the most important criterion, therefore it is suggested to the bank managers that they should pay attention in revealing reliable information about the e-banking facilities to their bank customers so as to build their trust. Apart from this, bank
managers should lay emphasis on improving some important criterion in the digital banking environment like reliability, security and privacy, efficiency, system availability, and assurance, which enhance customer satisfaction.

They may conduct a consumer centric survey based on this scale, which can be useful in identifying the level of service quality of e-services where they can easily project their consumers’ perception. They can also use these responses for finding the strengths and weaknesses of the e-facilities of the banks.

3. The proposed measurement model of antecedents and consequences of e-CRM can be utilised as a diagnostic instrument by marketing practitioners/banking experts to assess the satisfaction, loyalty, trust and dissemination of message about the experienced e-banking services among their bank customers. Further, bank managers can use this model for identifying the loyal customers who can act as brand ambassadors. This study has found that loyalty doesn’t necessarily lead to the word of mouth message. Therefore, the bank managers should focus as to how the customers can be retained within the banks and also turn into the banks’ brand ambassadors, acting as a source of free publicity about their e-banking facilities.

4. The findings point out that the bank managers should enhance user-friendly e-facilities to the customers, which would ultimately result in greater frequency of customer transactions. Also, the public sector banks should take steps to improve of the customers’ perception of their services, by using advanced technologies to enrich their banks brand image and to improve and renew the current e-services. It has been found that annual sales earned from the loyal customers by the public sector banks are less as compared to those by the private sector banks. To overcome this discrepancy, public sector banks should focus on the effective part of implementation of e-CRM practices. This would expedite winning the loyalty of the customers, which would ultimately increase their market share and promote customer lifetime value.

5. This study demonstrates that there exists a positive connectivity between competitive advantage and performance of e-CRM. It is suggested that the
banks’ management should develop the guidelines for executing the competitive advantage strategies by the bank managers. Moreover, banks should invest in the latest technology-oriented practices that ultimately enhance the non-financial and financial performance. This study has depicted that bank managers can use the present e-CRM performance scale, through the balance scorecard approach, for assessing the financial and non-financial performance of the banks in India.

6.5 Limitations of the Study

1. This empirical study has a limited scope, as the sample may be under-sized. Moreover, the research scale (Antecedents of e-CRM) of this study may not be applicable in other economies, because it has been validated and confirmed particularly in the context of the Indian economy.

2. Apart from this, the scale has been developed solely based on customers’ perceptions, while the perception of the other stakeholders had been ignored.

3. Foreign sector banks were not considered while analysing the banks’ determinants of e-banking services due to the non-availability of the relevant data.

4. As the study has been conducted through the structured questionnaire, the respondents might have deliberately given the responses that they actually did not experience, and hence, their responses might be coloured with subjectivity.

6.6 Directions for the Future Research

1. There is a need to further examine the reliability and validity of all the measurement instruments, which have been used in this study, in the context of more diverse e-commerce sectors that have a higher incidence of problems and to refine the scale, if necessary.

2. There is also a need to check the interaction effect by considering the different constructs such as customer satisfaction and trust on WOM; trust and loyalty on WOM, etc. Further, researchers can determine interaction effects in the proposed measurement model (Antecedents and Consequences of e-CRM).
3. Furthermore, demographic characteristics of customers like gender, age, income, education, etc. play a determining function in enhancing the customer usage rate of availing e-facilities. Further, researchers may check the moderating effect, taking these variables on the maintenance of relations with customers by the bankers.

4. Different geographical areas can be covered for making comparative study. For instance, studies can be conducted to distinguish the customers’ experience of e-banking services among rural, semi-urban and urban areas.

5. This study has been conducted in only two areas of the Northern regions of India, namely Chandigarh and Delhi NCT. The study can be extended to the other geographical regions. Also, area-wise comparison of the implementation of e-CRM practices with respect to the public sector, private sector and the foreign banks, can be made.

6. The present measurement scale has considered solely the quality aspects of e-CRM solutions. This can be broadened to other dimensions of e-CRM practices namely: operational, analytical and collaborative strategies of e-CRM.