1.1 INTRODUCTION

The purpose of business is to create new customers and retain old customers. Customer orientation is the ultimate key to success of any business. Customer Relationship Management (CRM) is a comprehensive approach for creating, maintaining and expanding customer relationships. CRM does not just belong to sales and marketing.

CRM is an intelligent blend of marketing and information technology for serving the customer with greater care and value. It is a new way of doing business covering all aspects. If any area is left out of CRM, the organisation is exposed to greater risk.\footnote{M. Subrahmanya Sarma and V. Kalyani, “C.R.M. in LIC – Some Reflections”, \textit{The Management Accountant}, Vol. XII, No.4, September 2006, p. 707.}

CRM is an integrated approach of dealing with customers with smart use of Information Technology. Computerisation of records, maintenance of customer data base, on-line customer service will enhance the customer loyalty apart from exploring new opportunities for cross selling/sell ups. It involves a dramatic change in the marketing strategies from products or sales-centric to customer-centric approach. CRM focuses on the total customer requirements. When any CRM strategy is implemented, it computes and analyses data about the target customers and their buying habits in multiple ways.
Relationship marketing is discovering the new and potential ways and strategies for enhancing customer’s value to business. Earlier, companies focused on mass marketing. But now they are selecting their customers more carefully and building long lasting and direct relationships with targeted customers.

Today, marketing managers realised the fact that instead of adding some more new customers, it is always profitable and easier to concentrate on the known market with old customers with new options, opportunities for business. In the past, many companies have focussed on finding new customers for their products and closing sales with them. Now this concept has undergone changes and has shifted towards keeping customers more delighted and loyal for building lasting relationships based on superior customer satisfaction and value. The goal of every company is shifting from making a profit on each sale to making long term profits by managing the life time value of a customer.

With the implementation of CRM, business concerns do a better job at a better price to retain old customers. Competitors find it increasingly difficult to acquire new customers. As a result, today, marketers spend less time on increasing the share of market and more time in enhancing the share of customer. They offer new or improved products to current customers and train employees to
cross-sell and up sell in order to market more products and services to existing customers.²

1.2 BANKING SECTOR SERVICES

Banking is a service industry. The product manufactured by it is a service, which is multi-dimensional in nature. Banking institutions are no longer expected to act as traditional mobiliser and deployer of financial resources in a particular country. Now they have to act as catalyst of change in the service sector. On account of globalisation and liberalisation, several sweeping changes have taken place in the financial sector. Since mid-1991, in India, there has been many financial reforms like deregulation of interest rates, dismantling of direct credit, etc. These economic reforms have created ample opportunities and challenges to financial intermediaries. The present banks, besides devising a suitable package of services to the domestic users of services, have to face the challenges of formulating an appropriate package of financial services useful to both domestic and international users.³

²Ibid. p. 709.

Present banks in future have to face stiff competition in the financial sector. They cannot sell services which are not user-specific. They would have to act as providers of services in buyers’ market rather than sellers’ market. The market driven banking is moving beyond the horizons of direct banking. In view of this, the banks have to adopt modern strategic marketing philosophy, besides, maintaining banks of operational management of their services. Modern bank management starts with the customers, live with customers and dies because of the customers. So, it is very important to know about the customer behaviour.

The formulation of marketing mix is directly or indirectly influenced by changing behaviour of the users. A gradual change in the users’ behaviour is a natural phenomena as multi facet developments in the socio-economic condition affect their mental condition. Either the general users or the industrial users can not overlook the impact of socio-economic transformation on their needs and requirements. The growing rate of literacy, expanding avenues for job creation, changing environmental conditions, Governmental regulations, sophistication in communication, innovation in education and a number of allied factors govern the behaviour of users. It is essential that a marketer is aware of all these developments so as to make the marketing decisions productive or effective.\(^4\)

\(^4\)Ibid., p. 12.
1.3 REVIEW OF LITERATURE

Natarajan et al., (1999) have explained about the development and application of a service template as a diagnostic tool for identifying opportunities for improvements in the service package. The operations in the branch of a bank in Bangalore, India, provide the context. For 21 service attributes, the gap between the expectations of a target customer group and the actual service experience is assessed through a customer survey. A service template graphically displaying the mean values of the responses for the expectations and the perceived service is constructed. Also, for each service attribute, tests of statistical significance for the mean values of the gap are performed. The results are used to develop priorities for improvements\(^5\).

Natarajan and Jahera (1999) noted that the debate on Service Quality (SQ) began in 1985 in the marketing literature. Significant contributions to the literature have also been made by those working in the field of operation management and organisational behaviour. Thus, the research done in the area of quality in the banking industry has been found in many scholarly journals both academic and practitioner papers. Some of these studies on the one hand deal with definitions and overviews of SQ, dimensions and measurements, and others carried out by practitioners or researchers focus on the importance of SQ,

functional areas of the banks, assessment and successful implementation of current practice.\textsuperscript{6}

Phatak and Abidi (2000) have made an attempt to study the gap between a client’s expectation and perception of the quality of services. The study is based on primary data collected with the help of questionnaires in addition to secondary data. Both private and nationalised banks are included in this study. An attempt is made to analyse the shortfalls in delivering quality services by banks and possible ways to improve the service quality\textsuperscript{7}.

McLachlin (2000) has explained to utilize literature from a number of disciplines, along with exploratory interviews with seven consultants and one client, to address one question, \textit{viz.}, “What is engagement success in consulting, from both the client and the consultant points of view”? In addressing this question, the paper considers distinctions between types of consulting, client expectations and needs, and short-and long-term revenue streams. It concludes by suggesting that a consulting engagement is successful if the consultant has met client expectations (by improving one or more of client performance, client capabilities, or organisational culture, without making any category worse) –


whether or not a core need has been addressed – and the consultant has enhanced his or her reputation, with expectations of future revenue streams - whether or not any immediate income has been received. 8

Allred and Addams (2000) articulated that the bank and credit union customers are surveyed to determine bank and credit union service quality performance. The results of this study indicate that credit unions rate is significantly higher than banks on 11 of the 14 service quality questions: access, courtesy, communication, credibility, security, empathy, tangibles, basic service, fairness, fixing mistakes, and guarantees. The findings also indicate that neither banks nor credit unions do a good job of surveying customer needs or retaining customers. Other results indicate that 50 per cent of total respondents surveyed reported that they had stopped using a financial service provider because of poor service performance. The vast majority of that group reported that their decision was made because a bank failed to provide adequate service. 9

Dale et al., (2000) pointed out that since the early 1990s there have been signs the move from total quality management (TQM) to excellence, and process control to process management that the TQM is perceived by some commentators

---


to be out-of-date and fallen by the wayside. The paper outlines these signs and points out that they can lead to a marginalisation of quality. However, through major trends such as business to business e-commerce and six sigma, there are clear indications that old style quality is coming back into the business arena because of the savings it can bring. These trends and their implications are examined in the paper.\textsuperscript{10}

Garcia – Lorenzo \textit{et al.}, (2000) described the main features of systems for channelling such participation, used in a series of companies in the automotive parts industry in the Northwest of Spain. These characteristics are obtained from research carried out in mid-1997 and based on personal interviews. Likewise, the great spread of this kind of practice found in this supply industry, mainly made up of Small and Medium sized Enterprises (SME), supports the idea that it is not only applicable in large companies. However, it should not be forgotten that the automobile sector has one of the longest traditions in continuous improvement and employee involvement activities.\textsuperscript{11}

\textsuperscript{10}B.G. Dale, R.T. Williams and T. Vander Wiele, “Marginalisation of Quality: Is there a Case to Answer”, \textit{The TQM Magazine}, Vol. 12, No. 4, November 2000, pp. 266-274.

\textsuperscript{11}J.A. Garcia-Lorenzo C. Prado and J. C. Arca, “Continuous Improvement and Employee Participation in SMEs”, \textit{The TQM Magazine}, Vol. 12, No.4, January 2000, pp. 290-294.
Zhang (2000) expressed that in order to provide readers with a better understanding of China’s approach to quality management, this paper presents China’s quality management history, the main quality management efforts adopted by the Chinese government, the product quality situation, and the reasons for product quality problems. Finally, it has been concluded that governments can only play a role in shaping the context and institutional structure surrounding companies, they cannot create competitive industries; only companies can do that. If the quality of people, especially governmental officials, top management, and employees does not improve, it is very difficult for the country to improve product quality.\textsuperscript{12}

Terziovski and Samson (2000) tested the effects of company size on the strength of the relationship between TQM and organisational performance based on a cross-sectional study of manufacturing firms in Australia and New Zealand. The paper tests two hypotheses involving TQM and organisational performance. The central finding of the study is that TQM has a significant and positive relationship with most of the dimensions of organisational performance. The relationship weakened for defect rates and warranty costs when it was co-varied for company size. It has been concluded that company size impedes the implementation of TQM. Larger companies tend to gain greater benefits from TQM than smaller firms. These findings are consistent with some of the literature.\textsuperscript{12}

Overall, the findings show that a typical manufacturing organisation is more likely to achieve high organisational performance with TQM than without TQM. The findings have implications for managers wishing to formulate a business strategy based on TQM.\textsuperscript{13}

The findings of Anthony and Addams (2000) indicated that credit unions’ rate is significantly higher than banks on 11 of the 14 SQ questions: access; courtesy; communication; credibility; security; empathy; tangibles; basic service; fairness; fixing mistakes; and guarantees. Also they indicate that neither banks nor credit unions do a good job of surveying customer needs or retaining customers.\textsuperscript{14}

The article by Lassar \textit{et al.}, (2000) examined the effects of SQ on customer satisfaction by utilising a sample of international private banking customers where SQ is operationalised via two measures SERVQUAL and Technical/Functional Quality.\textsuperscript{15}

The findings of Paulin \textit{et al.}, (2000) stated that changing account managers is negatively associated with the bank’s external effectiveness as measured by the

\begin{flushright}
\end{flushright}

\begin{flushright}
\textsuperscript{14}T. Anthony and H. Addams , “SQ at Banks and Credit Unions”, \textit{Managing SQ}, Vol. 10, No. 1, August 2000, pp. 52-60.
\end{flushright}

\begin{flushright}
\end{flushright}
customers’ judgments of satisfaction and SQ, their purchase intentions and their willingness to recommend the bank.\textsuperscript{16}

Winnie et al., (2001) reviewed the relationships of latent constructs specified in these popular national customer satisfaction measurement and management system and concludes that the relationships specified in existing national customer satisfaction systems are far from conclusive. It therefore, attempts to extend the current understanding of customer satisfaction and customer loyalty at a retail level in an industry-specific context. The adopted Kanji Customer Satisfaction Index is selected and tested with the data of 450 customers of retail banks in Hong Kong. Finally, findings and implications are discussed\textsuperscript{17}.

Rice and Mahmoud (2001) have structured about Islamic bank, transactions and organisations have been growing in the last decade in response to increasing demand. However, Islamic banks face challenges from non-Islamic institutions because of the mergers of several institutions, inter-organisational collaboration, introduction of new products and services, improved services, and so on. Other contemporary challenges include continuous environmental change,


\textsuperscript{17}Winnie, Y. L. Wong and G. K. Kanji, “Measuring Customer Satisfaction: Evidence from Hong Kong Retail Banking Industry”, \textit{Total Quality Management}, Vol. 12, No. 7 & 8, December 2001, pp. 939-948
the speed of change, the impact of the Internet and mobile banking, and the need for an international focus. To respond effectively to these challenges, Islamic financial institutions need to establish management systems that integrate quality management, creativity, and innovation. This paper presents a framework for such a management system and discusses its implementation.\textsuperscript{18}

Montes et al., (2003) tried to analyse whether the working environment that bank employees perceive is related to their affective responses and their perception about the service quality that is provided in the bank. More specifically, the study concentrate into the relationships between the organisational obstacles perceived, the employees’ psychological climate, the extrinsic recognition received, and the service culture, with various affective responses from the employees (organisational commitment, job satisfaction and work motivation), as well as the perception of the service quality that the bank provides. A theoretical model is developed and tested using empirical evidence from the Spanish bank sector. Results support the hypothetical model\textsuperscript{19}.

Zablah et al.,(2004) have stated in the paper, “An evaluation of Divergent Perspective on Customer Relationship Management : Towards a Common


Understanding of an Emerging Phenomenon”, that the highly published failure of Customer Relationship Management (CRM) initiatives, academic research on CRM has begun to flourish. While, numerous studies have yielded important insights, the extent CRM literature appears to be inconsistent and is highly fragmented due, primarily, to the lack of common conceptualisation. Thus, to help advance a cohesive body of knowledge on this topic of growing interest and importance, this paper attempts to provide a clear and accurate delineation of CRM’s domain. Following the review and analysis of process, strategy, philosophy, capability and technology-based CRM perspectives, the authors propose that the phenomenon is best conceptualised as an ongoing process that involves the development and leveraging of market intelligence for the purpose of building and maintaining a profit-maximizing portfolio of customer relationships. Based on the proposed conceptualization, a detailed description of the CRM process is provided, along with a comprehensive framework intended to aid marketers in their quest to achieve CRM success.20

Laroche, et al., (2004) voiced that the influence of culture on the measurement of service quality and satisfaction in dentists’ office settings were examined by a few authors. Respondents from the United States, Canada, and Japan participated in a 2x2 factorial experiment in which the authors manipulated

both expectations (high/low) and service performance (high/low) in a series of scenarios. With partial metric invariance, latent mean comparisons reveal that regardless of expectations, Japanese respondents report lower quality perceptions and satisfaction ratings when performance is lower than those of their U.S. and Canadian counterparts. Thus, there is some evidence that Japanese consumers are more conservative in their evaluations of superior service but are less critical (or more forgiving) of inferior service. Managerial implications and future research directions are also discussed.\textsuperscript{21}

Bhat (2005) articulated that the service quality in banks and its variation across demographic variables. The study offers suggestions to make overall service quality in banks more effective and efficient. The results of the study lead to the conclusion that service quality of foreign banks is comparatively much better than that of Indian banks and there are service quality variations across demographic variables.\textsuperscript{22}

Johnson and Leonard (2005) reported that the concept of customer value has its roots in the quality movement, work done in the area of developing


customer focused organisations, and in the marketing concept of market orientation. This has seen many companies move away from a production orientation and from the 1980s fascination with mergers and acquisitions aimed to deliver market share, to concepts based on relationship marketing, customer loyalty and retention, brand equity, and customer equity. The shift has fundamentally been a move from product focus to customer focus and a related shift from product quality to service quality. While the research still follows different lines, there are useful lessons to be learned in areas where there is strong agreement. This thesis discusses what the past ten years have taught about this shift.\textsuperscript{23}

Al-Hawari, et al., (2005) explained that in relation to the banking sector, the research has identified that bank customers tend to use a combination of automated service channels. As such, this research strives to develop a comprehensive model of banking automated service quality taking into consideration the unique attributes of each delivery channel and other dimensions that have a potential influence on quality issues. The proposed model has been

empirically tested for uni-dimensionality, reliability and validity using confirmatory factor analysis.24

The work of Bilich and Neto (2005) dealt with the management of quality as a fundamental component in the formulation of strategies for commercial banks and it is one of the important elements in the financial system. Considering the increasing emphasis laid and preoccupation of large organisations with quality, the insertion of banks in this context becomes of fundamental importance, in as much as quality has been provoking a veritable change of paradigms in management. A model for the macro-function quality is proposed, the important and relevant variables related to the dimensions of the model are identified and the desirable actions with respect to each variable and dimension are arrived at through empirical data. In the development of the model for the management of quality in banks, data obtained from 56 executives representing a universe of 43 banks actuating in Brazil are analysed. Concluding the work, alternatives are presented for adequate conduct of the actions for quality considering five


The service sector is the most important sector, which contributes largely to the national economy. In India, the banking sector is an important component of this sector. The share of banking and insurance sector has burgeoned from 2.78\% in 1980-81 to 6.27\% in 1997-98. It has been so due to the increasing significance of financial services in the post-reforms era. In case of banking services, the varied service products being offered and their interface with the information technology have emerged as the potent tools of competition. The banks are using these tools to seize the markets and be the ultimate winners. The recent survey on banks shows that HDFC bank, which has been rated as the number one bank in India has quality growth as the main objective. Thus, the banking intermediaries also have recently started focusing on the quality issues. In this context, the service quality perception among the customers of the banks is the most critical issue.

Alka Sharma and Versha Mehta (2005) noted that service quality is an attempt in the direction, where quality perceptions of the four leading banks have been compared to reach logical conclusions.
Economic liberalisation and globalisation, Information Technology (IT) revolution, changing customer requirements/expectations and increasing competition have posed a challenge to the existing Indian banking scenario. During the past few years, the banking sector has witnessed revolutionary changes. The entry of private and foreign banks has posed a challenge to the monopoly enjoyed by the nationalised banks. With increasing competition, the importance of quality services in banking has gained paramount importance. To survive, banks will have to rethink their strategy in delivering quality services to attract and hold clients. The service challenge involves developing new services that will meet clients needs in a better manner; improving quality and variety of existing services and finally, providing and distributing these services in a manner that best serves the clients. \(^{26}\)

Ehret (2005) in his study has stated, “Managing the Trade-off between Relationships and Value Networks, Towards a Value-Based Approach of Customer Relationship Management in Business-to-Business Markets”, that the management of buyer-seller relationships is an early antecedent to the development of Customer Relationships Management (CRM) concepts. Currently, CRM concepts are being challenged by the rise of value networks. Value networks can and, often, do interfere with customer relationships and

thereby call for a broader range of concepts to analyse and understand relationship management and the influence of value network on relationships. The article describes the nature of the problem between relationships and value networks, reviews the current state of research, and describes the contributions of the articles presented in this special issue on CRM in Business-to-Business markets.27

Maklan et al., (2005) in their study, “Using Real Options to Help Build the Business Case for CRM Investment”, have stated that the long-term benefits of implementing a customer relationship management programme are widely accepted as being: learning from customers, building customer retention, and reduced market uncertainty. Yet, high rates of failure in CRM can originate right at the stage where the investment decisions are made. Traditional discounted cash flow analysis alone does not value or focus managerial attention upon the strategic long-term benefits of CRM. Through a simulated case study analysis, the paper illustrates how the addition of real options to discounted cash flow can improve CRM investment decision making. It encourages managers to verify critical assumptions and reduce both investment and business risk.28


Surya Rao and Swarnalatha (2006) explained that the need of the hour is to develop awareness about Total Quality Management (TQM) approach in banks to strive for achieving “Zero error” and “Zero grievances” levels. Infact, most of the bank systems and services are designed to control customers rather than satisfy customers. Banks in India, especially public sector banks, have to bring in more quality in their activities and services in order to be competitive in this changing banking environment. Most bankers would like to believe that they are in the finance industry and not in the service industry. Thus, they tend to compete in terms of financial powers rather than service quality. Total quality management, which is about total customer service and continuous customer satisfaction, is applicable not only to the manufacturing industry but also to the service sector where the customer is just as important. Services are where the future is. It has been witnessed in the most developed countries of the world that service sector has come to occupy the top position in their economics. Customer satisfaction perhaps is the only route to survival and growth. Developing strategies that focus on satisfaction as the starting point make it imperative to identify what satisfies or makes the customer happy. The public sector banks must weed out potential bugs and build delight in their delivery to customers. Customer’s decision to patronize one and not the other is based on quality service
offered to him. Banks, therefore, prosper or decline, depending upon the quality of service they provide to their customers.29

Vanniarajan and Vikkraman (2006) focused on the link between customers’ satisfaction and organisational performance. Three groups of banks viz., Associates of State Bank of India, Nationalised Banks and Private Sector Banks are included in the study. The empirical data on customer satisfaction on the quality of various services offered by the banks and its business performance are collected through interview schedule. Based on the empirical data, authors identify the important items in the service quality of banks as Empathy, Assurance, Reliability, Tangibles and Responsiveness. The study identifies the positive impact of customer satisfaction on service quality of banks resulting in its net profit. The significant impact on net profit is created by the customers’ satisfaction on the service quality factors, namely, Empathy, Assurance and Tangibles. The study concludes that the suitable strategy to increase the profit among the banks is creating, maintaining and enhancing appropriate service quality to the customers30.


Torkzadeh et al., (2006) have reported that the results of a study designed in close collaboration with Merck-Medco can identify key barriers to the success of their customer relationship management. To identify the key factors, they first used focus groups of principle users of the system to brainstorm and generate a list of scenarios and issues. A team of managers, supervisors and customer service representatives then consolidated this list. A 54-item survey is derived from the list and used to collect 1460 responses from the user groups within the company. Data are equally divided into two sets. Exploratory factor analysis is used with the first data set to identify principal factors that explained the majority of problem areas. Structural equation modeling is used with the second data set to further examine and conform the initial list of factors. The study results suggests a seven – factor 21-item model describing barriers to the success of customer relationship management in terms of ‘standard operating procedure compliance’, ‘accountability and ownership’, ‘callback information content’, ‘customer contact process’, ‘billing issues’, ‘dispensing and replacement process’ and ‘queuing procedure’. These factors explained the majority of customer relationship problems faced by the company. These measures can be used by the company to plan and monitor remedial response. Evidence of reliability and construct validity is presented for the measurement models and decision-making implications are discussed.\(^{31}\)

Chalmeta (2006) has stated in the research work “Methodology for Customer Relationship Management”, that the Customer Relationship Management (CRM) is a customer-focused business strategy that dynamically integrates sales, marketing and customer care service in order to create and add value for the company and its customers. This change towards a customer-focused strategy is leading to a strong demand for CRM solutions by companies. However, in spite of companies’ interest in this new management model, many CRM implementations fail. One of the main reasons for this lack of success is that the existing methodologies being used to approach a CRM project are not adequate, since they do not satisfactorily integrate and complement the strategic and technological aspects of CRM. This paper describes a formal methodology for directing the process of developing and implementing a CRM system that considers and integrates various aspects, such as defining a customer strategy, re-engineering customer-oriented business processes, human resources management, the computer system, management of change and continuous improvement.

Pan et al., (2006) in their study have stated that the case of the National IT Literacy Program (NITLP) as part of Singapore’s e-government initiative serves to illustrate the evolution of strategic Customer Relationship Management (CRM) practices. The role of CRM has remained relatively consistent even though its practices have evolved in response to both environmental and technological

---

changes. This study introduces the concepts of relational incentive, relational value and relational tool that position indirect communications as an important contender to direct communications for organizational relationship building. This study adopts a relational perspective with which to formulate a managerial strategy for CRM that is independent of direct organizational involvement.

Kim et al., (2006) in their study have described that the more a marketing paradigm evolves, the more long-term relationship with customers gains its importance, CRM, a recent marketing paradigm, pursues long-term relationship with profitable customers. It can be a starting point of relationship management to understand and measure the true value of customers since marketing management as a whole is to be deployed toward the targeted customers and profitable customers, to foster customers’ full profit potential. Corporate success depends on an organisation’s ability to build and maintain loyal and valued customer relationships. Therefore, it is essential to build refined strategies for customers based on their value. In their paper, they propose a framework for analysing customer value and segmenting customers based on their value. After segmenting customers, based on their value, strategies building according to

---

customer segment been illustrated through a case study on a wireless telecommunication company$^{34}$.

Kim (2006) in his study have described that the effects of variable selection and class distribution on the performance of specific logic regression (i.e., a primitive classifier system) and Artificial Neural Network (ANN; a relatively more sophisticated classifier system) implementations in a Customer Relationship Management (CRM) setting. Finally, ensemble models are constructed by combining the predictions of multiple classifiers. This paper shows that ANN ensembles with variable selection show the most stable performance over various class distributions$^{35}$.

Wang and Head (2007) in their study have described that the web is increasingly being viewed as a tool and place to enhance customer relationship. In this paper they have defined a model to analyse the web characteristics that aid in building customer relationships and then used this model to examine consumer relationship building mechanisms in online retailing (e-tailing). Through a survey of 177 shoppers who had bought books, CDs, or DVDs online, the casual model was validated using LISREL; 13 out of 14 hypotheses were supported. This


research has contributed to both theory and practice by providing a validated model to analyse online consumer relationship building and suggesting mechanisms to help e-tailers focus on online consumer relationship management.

Madill et al., (2007) in their study have stated that the managing relationship with customers and clients is a critical task for industrial sales organisations. This paper reports on research that focuses on improving client relationships through effective handling of account manager turnover and improved account management. Even in situations where account manager turnover is high, the relationship between the company and the SME client does not suffer if the account management turnover process is well managed. When account manager turnover is not well managed, customer satisfaction suffers. The research also identifies eleven specific management activities that are highly related to supplier satisfaction with both the account manager and the supplier financial institution.

Seng and Hwang (2007) in their study have stated that the most existing network-based customer services heavily rely on manpower in replying e-mails or

---


on-line requests from customers, which not only increases the service cost, but also delay the time for responding the service requests. To cope with these problems, this paper proposed a customer service system, which can automatically handle customer requests by analyzing the contents of the requests and finding the most feasible answers from the Frequently Asked Question (FAQ) database. In the situation that a customer is not satisfied with the reply, the system will forward the request to the appropriate service personnel for further processing. An assistance mechanism has been developed to help the service personnel in finding potential answers from existing FAQ data or creating more appropriate answers. Experimental results on practical applications showed that over 87.3 per cent of users are satisfied with the replies given by the system; therefore, they concluded that the system can significantly reduce the service cost and provide more efficient and effective customer service\textsuperscript{38}.

Mendoza \textit{et al.}, (2007) in their study have stated that most organizations have perceived the Customer Relationship Management (CRM) concept as a technological solution for problems in individual areas, accompanied by a great deal of uncoordinated initiatives. Nevertheless, CRM must be conceived as a strategy, due to its human, technological and processes implications, at the time on organization decides to implement it. On this basis, the main goal stated in this

research is to propose, justify and validate a model based on Critical Success Factors (CSFs) that will constitute a guide for companies in the implementation and diagnosis of a CRM strategy. The model is conformed by a set of 13 CSFs with their 55 corresponding metrics, which will serve as a guide for organizations wishing to apply this type of strategy. These factors cover the three key aspects of every CRM strategy (human factor, processes, and technology): giving a global focus and propitiating success in the implementation of a CRM strategy. These CSFs – and their metrics – are evaluated by a group of internationally experts allowing determining guidelines for a CRM implementation as well as the probable causes of the deficiencies in past projects.\(^{39}\)

Ha (2007) suggested that the customer relationship management perspective has used to investigate customer behaviour. This study differentiates between customers through customer segmentation, tracks customer shifts from segment to segment over time, discovers customer segment knowledge to build an individual transition path and a dominant transition path, and then predicts customer segment behaviour patterns. By using real-world data, this study

---

evaluates the accuracy of predictive models. The concluding remarks discuss future research in this area.

Tseng and Huang (2007) have introduced that the application of the Rough Set Theory (RST) to feature selection in Customer Relationship Management (CRM). Compared to other methods, the RST approach has the advantage of combining both qualitative and quantitative information in the decision analysis, which is extremely important for CRM. To derive the decision rules from historical data for identifying features that contribute to CRM, both the mathematical formulation and the heuristic algorithm are developed in this paper. The proposed algorithm is comprised to both equal and unequal weight cases of the feature content with the limitation of the mathematical models. This algorithm is able to derive the rules and identify the most significant features simultaneously, which is unique and useful in solving CRM problems. A case study of a video game system purchase is validated by historical data, and the results showed the practical viability of the RST approach for predicting customer purchasing behaviour. This paper forms the basis for solving many other similar problems that occur in the service industry.

---

Buckinx et al., (2007) in their study have stated that loyalty and targeting are central topics in Customer Relationship Management. Yet, the information that resides in customer databases only records transactions at a single company, whereby customer loyalty is generally unavailable. In this study, they have enriched the customer database with a prediction of a customer’s behavioural loyalty such that it can be deployed for targeted marketing actions without the necessary to measure the loyalty of every single customer. To this end, they compare multiple linear regression with two state-of-the-art machine learning techniques (random forests and automatic relevance determination neutral networks). They also show that (i) a customer’s behavioural loyalty can be predicted to a reasonable degree using the transactional database, (ii) given that overfitting is controlled for by the variable-selection procedure, for which a multiple linear regression model significantly outperforms the other models, (iii) the proposed variable-selection procedure has a beneficial impact on the reduction of multicollinearity; and (iv) the most important indicator of behavioural loyalty consists of the variety of products previously purchased\(^{42}\).

Wu et al., (2007) in their study have reported the application of the operational complexity index. The aim is to know the relationship between costs and the complexity index. An Investigation is carried out measurements on two

types of supplier-customer systems in the U.K. One is make-to-stock with low product variety but high volume, while the second is make-to-order with high variety but low volume. The research work finds some evidence that inventory costs are associated with operational complexity. Moreover, while the index is generic to both case studies, there seems to be a direct link between index value and cost in the make-to-stock case\textsuperscript{43}.

Hsu (2008) in his study has proposed an index for online customer satisfaction, which is adapted from an American Customer Satisfaction Index (ACSI). Since online shopping is an experience different in many ways from traditional shopping, a new index for measuring electronic-Customer Satisfaction Index (e-CSI) was required. Thus, this study was the first step towards integrating satisfaction literature to propose an index for online contexts. The e-CSI model is tested in the context of a one month study of Taiwan’s largest online retailer (PChome Online) where it is found to significantly predict customer loyalty and overall customer satisfaction. In this study, he point out that the satisfaction score of PChome Online is similar to the average for the online retail industry in ACSI. This model also allows the online retailer to understand the specific factors that the significantly influence overall customer satisfaction by reading the casual relationship in the e-CSI model and the strategic management map. The partial

squares (PLS) method is used to test the theoretical model and to derive the e-CSI score\textsuperscript{44}.

Mahdavi et al., (2008) in their study have stated that the internet technology enables companies to capture new customers, track their performance and online behaviour, and customize communications, products, services, and prices. Analyses of customers and customer interactions for Electronic Customer Relationship Management (E-CRM) can be performed by way of using Data Mining (DM), optimization methods, or combined approaches. One key issue in the analysis of access patterns on the Web is the clustering and classification of Web documents. Generally, the classification has its base on analytical models which assume a pre-fixed set of keywords (attributes) with predefined list of categories. This assumption is not realistic for large and evolving collections of documents such as World Wide Web. They propose a new approach to solve the problem of unknown number of evolving categories. The approach begins with the classification of test documents into a set of initial categories. A working prototype system which is based on Fuzzy Clustering CRM (FC-CRM) has been

developed and presented to validate the proposed approach and illustrate how it handles the dynamics inflow of new documents.\textsuperscript{45}

Singh (2008) in his study have reported that unlike the experience in the broader Quality Management (QM) area, for ISO 9000, the relationships between management practices associated with the standard and performance is relatively under-researched. This has contributed to a general lack of clarity on how the standard works and how effective it is in generating the espoused benefits. In this paper, an attempt was made to fill this gap. Through a review of the standard and associated literature, a set of six management practice constructs (management policies, plans and actions, focus on customers, capable employees, reliable suppliers, sound communication system and steady processes) are identified. Further, three performance constructs (consistent quality outputs, satisfied customers and business performance) are developed based on the espoused outcomes of the standard. Relationships between these constructs are hypothesized, with the relationship between management policies, plans and actions and steady processes constructs being partially mediated by the other four management practice constructs, and the consistent quality outputs and business performance constructs being fully mediated by satisfied customers construct. These relationships are consolidated into a model and empirically tested with data.

from 418 Australian ISO 9000 registered manufacturing plans using the structural equation modelling technique. Results show that only two out of the 12 hypothesized relationships are not supported, with management policies, plans and actions being negatively related to steady processes, and focus on customers and steady processes relationship being statistically insignificant. This result supports the assertion that the top management team plays a ubiquitous role, albeit an indirect one in creating steady processes. Also, strong focus on customers could be of little value in creating steady processes. Overall, this study defines the role of stakeholders and shows, how they interact with the salient aspects of the ISO 9000 standard. They also throw insights into how the standard works have been developed. Further, a validated framework for effective implementation of ISO 9000 has been produced.

1.4. STATEMENT OF THE PROBLEM

The process of globalisation and liberalisation has exerted its huge influence on the Indian banking sector. In banks, a service sector, customer service should not only be considered as a function, but a way of life also. The success of a bank depends on how much it fulfills customer needs. Therefore, the bank should be customer oriented to meet challenges to today’s competitive environment.

---

Customers needs and expectations change from time to time, since it is highly dynamic with respect to societal influence. Today’s customers are aware of their needs. Entry of new branches of foreign banks in India and their better services to customers have increased customers expectations of same quality of services from Indian banks. So, it is the time for Indian banks to innovate new products and services and also to refine the existing services.

A way to remain competitive in the more and more complex banking environment is the use of CRM concept. Customer Relationship Management (CRM) is a business strategy geared towards acquiring, retaining and growing more profitable customers. The basic approach of CRM in a banking context is to center all operations of a bank on its customers, creating a ‘CRM state of mind’ in an enterprise wide manner. Today, Indian banks are also trying to develop service quality with customers. They are continuously involved to redefine and to provide new ideas and techniques to the customers. They are searching new concepts for maintaining, enhancing the relationship with customers and getting feedback from them about the product offerings and suggestions on improvement of the products.

After a lot of exercise and thoughts, they are providing more flexible banking hours, evening counters, elegant furniture, comfortable ambience, impressive interior, well designed counters, responsive and well behaved personal
followed by a regular contacts with the customers have not started to receive much greater attention than even before. A trained and motivated staff with full of details of products and services, customer friendly work culture, computerised banking operations, positive attitude and optimistic outlook of branch personnel, looking for more avenues to serve and retain existing customers, intense customer relationship, use of modern state of the art technology, conversant with products and services being offered and procedures to be followed, effective mechanism for quick redressed of complaints, counseling and guidance, use of sophisticated communication devices, i.e., fax, telex, and e-mail are the factors to with stand the challenges posed before the Indian banks in delivering of satisfactory services to their customers.

Trust is one of the basic antecedents to achieve loyalty. Another factor that has an impact on customer loyalty is satisfaction. In addition an employee must also achieve both trust and satisfaction in the bank where he serves, since employees will influence how a customer feels towards the bank. A sincere attempt has been made by the researcher to analyse the efforts taken by the banker to create customers satisfaction and loyalty. Thus, the complete evaluation of customer relationship management in banking sector is being undertaken. Particularly, this study is focused at Virudhunagar district as this is an important industrial as well as commercial sector in southern belt of Tamil Nadu, India.
1.5 SCOPE OF THE STUDY

The purpose of any business is to create and retain the customers. Now-a-days, banking sector is very important in the world’s economy. So, the banking units gain increasing importance of Customer Relationship Management (CRM) for many reasons, such as,

(i) For providing customer friendly work culture and computerized banking operations.

(ii) For serving and retaining the existing customers.

(iii) Good service will help the bankers to create long term relationships with customers.

CRM is an integrated information system that brings together information about consumers, marketing effectiveness, sales and market trends. Particularly, this study is focused at banks functioning in Virudhunagar district as this is an important industrial as well as commercial sector in southern belt of Tamil Nadu, India. The primary data has been collected from four banks namely, SBI, IOB, being Public Sector Banks and TMB, ICICI being Private Sector Banks.
1.6 OBJECTIVES

The specific objectives of the present study are as follows:

1. To portray the origin, need of CRM and CRM in banking sector.

2. To study the growth and development of public and private sector banks and their working performance.

3. To analyse the socio-economic profile of the customers and their level of perception towards customer relationship management.

4. To compare the perception of the customers towards customer relationship management in public and private sector banks.

5. To offer suitable suggestions to improve the customer services of the banks on the basis of findings of the study.

1.7 METHODOLOGY

1.7.1. Sources of Data

The study is based on both primary as well as secondary data. The primary data has been collected from 250 public sector bank customers and 250 private sector bank customers in Virudhunagar district, with the help of pre-tested interview schedules. Virudhunagar district covers the area such as Virudhunagar, Rajapalayam, Srivilliputtur, Sivakasi, Kariapatti, Thiruchuli, Arupukottai and Sattur. For the purpose of evaluating the effectiveness of the questionnaire, it has been circulated to bankers and customers in Virudhunagar District.
The secondary data has been collected for a period of seven years from the records of banks, books, reports, journals, encyclopedia and websites.

1.7.2 Sampling Design

In the present study, the researcher has selected 500 public and private sector bank customers in Virudhunagar District. It is observed that total of 96 bank branches in this district on which, 69 are public sector bank branches and 27 are private sector bank branches. Stratified random sampling technique has been adopted for the selection of 500 respondents. On the basis of number of branches, number of customers, volume of business and frequency of transactions, 137 from SBI, 113 from IOB, 157 from TMB, and 93 from ICICI were randomly selected.

1.7.3. Data Processing

After collecting the Primary data with the help of interview schedule, a thorough verification of data was made. Then editing work was undertaken. Data processing and data analysis was also carried out with the help of Statistical Package for Social Sciences (SPSS).

In order to measure the attitude score, ‘Likert’s five point’ scaling technique is used to classify the level of attitude into high, medium and low level. Arithmetic mean (\(\bar{X}\)) of the score and Standard Deviation (S.D) were computed. The following relationship has been used to classify the data into three categories.
Score value \((\bar{X} + \text{S.D.})\) \(\geq\) High level attitude

Score value \((\bar{X} - \text{S.D.})\) \(\leq\) Low level attitude

Score value in between \((\bar{X} - \text{S.D.})\) and \((\bar{X} + \text{S.D.})\) is medium level attitude.

In order to examine the relationship between the level of attitudes and characteristics of the customers, Chi-square test is applied.

The factor analysis has been used to identify the factors which are responsible for the performance of banks with regard to service quality.

In order to find out the trend and growth performance of public and Private Sector Banks of Virudhunagar District, the linear and semi-log model was applied by using the following formulae:

Linear Model:
\[
Y = a + b t
\]

Semi – Log Model
\[
\log Y = a + b t
\]

Where,
\[
Y = \text{dependent variable},
\]
\[
t = \text{time variable},
\]
\[
a \text{ and } b \text{ are the parameters to be estimated.}
\]

Compound Growth Rate = \((\text{Antilog } b - 1) \times 100\)

\[
\text{Antilog } b = \text{antilog} \left( \frac{\sum \log xy}{\sum x^2} \right)
\]
1.7.4. Period of the Study

The primary data have been collected from the respondents through Interview schedule in 2008. The secondary data cover a period of seven years from 2001 – 2002 to 2007-2008.

1.8 PROFILE OF THE STUDY AREA

In this section, an attempt is made to describe the profile of the study area, Virudhunagar district, in terms of origin, location, administrative set up, area classification on the basis of industrial backwardness, human resources, agricultural resources, forest resources, trade and commerce, industries and other infrastructure facilities.

Tamil Nadu is the southernmost state in the Indian sub-continent. It is bound on the north by Andhra Pradesh and Karnataka States, on the south by the Indian Ocean, on the west by the State of Kerala and the Western Ghats and on the east by the Bay of Bengal. Tamil Nadu covers a little over 1,30,000 km², representing about four per cent of India’s geographical area. In terms of area, Tamil Nadu ranks eleventh in the country.

According to the 2001 census, Tamil Nadu had a population of 62.1 million which makes it the seventh largest state in the country. Tamil Nadu is one of the most densely populated states in India, with 378 persons per km², as against the all-India figure of 324 persons per km². As regards the density of population, Tamil Nadu stands fifth among the States of India.
FIGURE 1.1
TAMIL NADU MAP
1.8.1 VIRUDHUNAGAR DISTRICT

♦ Origin

The erstwhile Ramanathapuram district was formed on first June, 1910 by carving out certain portions from Madurai and Tirunelveli districts. The Government of Tamil Nadu decided to bifurcate large districts into small districts in order to ensure an effective, and transparent administration. To fall in line with the above policy, the Government trifurcated the erstwhile Ramanthapuram, district into Kamarajar, Ramanathapuram and Pasumpon Thevar Thirumaganar district.

Kamarajar district was formed on 15th July, 1984 and was named after the freedom fighter and former Chief Minister of Tamil Nadu, Sri. K. Kamaraj. The district started functioning on 15th March 1985. Later, there was a continuous class struggle among the various sections of the people in the southern regions of Tamil Nadu. Hence, the Government of Tamil Nadu changed the name of Kamarajar district into Virudhunagar district on 1st July, 1997. Now, the district is functioning with Virudhunagar town as its head quarters.
Location

Virudhunagar district is located between $9^\circ 07'$ and $10^\circ 22'$ North latitudes and $77^\circ 22'$ and $79^\circ 25'$ East longitudes. It has an area of about 4270.3 km$^2$. It is bound on the west by the Western Ghats, on the north by Madurai district, on the north–east by Sivagangai district, on the east and the south-east by Ramanathapuram district and on the South by Thoothukkudi district.\footnote{Tamil Nadu District Census Hand Book, Virudhunagar District, Government of Tamil Nadu, Part XIII-A, Series 20, 2001.}
FIGURE 1.2
VIRUDHUNAGAR DISTRICT MAP
Physical Features

Virudhunagar district is landlocked on all sides with no direct access to the sea. It is bound on the north by Madurai, on the north-east by Sivaganga, on the east by Ramanathapuram and on the south by Tirunelveli and Tuticorin districts.

Physiographically it consists of two distinct regions. The eastern slopes of the Western Ghats in Srivilliputtur and Rajapalayam taluks and the black soil plains of Sivakasi, Virudhunagar, Sattur, Aruppukottai, Tiruchili and Kariapatti. The average height of the hills of the eastern slopes of the Western Ghats is 1500m, though a few peaks rise to 1700m. The highest peaks are Peyimalai Mottai and Kottamalai. The foothills have rich loamy soil with good vegetation cover. The plains with black cotton soil (locally known as karisal) have underlying cal carious formations.

Virudhunagar does not have any perennial rivers. The Vaippar, Arjuna river, and Gundar constitute the river network of the district. Numerous streams and rivulets, activated by the monsoon, feed these rivers. The Mandiri odai and Girudhamal river flow into the Gundar, which irrigates the north-eastern region of the district. The Sengundrapuram odai, Kausikamanadi, Uppodai and Mannarkottaiyar odai are feeder streams of the Arjuna river, which flows through the central portion of the district. The Kayalkudiyar and Nichepa river join the
Vaippar river, which runs through the southern part of the district. The Arjuna river and the Vaippar river meet at Irukkangudi.

♦ Administrative Set-up

For administrative convenience, Virudhunagar district has been divided into two revenue divisions, one at Sivakasi comprising Srivilliputhur, Rajapalayam, Sattur and Sivakasi taluks and the other at Aruppukottai comprising Aruppukottai, Kariapatti, Virudhunagar and Thiruchuli taluks. It has 11 community development blocks viz., Rajapalayam, Sivakasi, Virudhunagar, Sattur, Aruppukottai, Vembakottai, Srivilliputhur, Watrap, Thiruchuli, Narikudi and Kariapatti, six municipalities viz., Aruppukottai, Virudhunagar, Sattur, Sivakasi, Srivilliputhur and Rajapalayam, 600 revenue villages, 464 village panchayats, 11 panchayat Unions and 10 town panchayats. It covers one parliamentary constituency and six assembly constituencies.48

♦ Area and Population

According to the Directorate of Statistics, Chennai, the district covers an area of 4270.3 km² or 1648.8 mile². Virudhunagar district occupies the fifteenth rank among the districts of the State of Tamil Nadu with regard to its size. Table 1.1 clearly indicates the total geographical area of the district.

### TABLE 1.1
**TOTAL GEOGRAPHICAL AREA OF THE DISTRICT**

<table>
<thead>
<tr>
<th>Status</th>
<th>Area (in km²)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>4179.4</td>
<td>97.87</td>
</tr>
<tr>
<td>Urban</td>
<td>90.9</td>
<td>2.13</td>
</tr>
<tr>
<td>Total</td>
<td>4270.3</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Source: Directorate of Statistics, Chennai.

The population of the district is 15,65,037. Of this total population, 7,84,912 (50.15 per cent) are males and the remaining 7,80,125 (49.85 per cent) are females. In the district 9,79,333 persons constituting 62.58 per cent of the total population live in rural areas and the rest of 5,85,704 persons constituting 37.42 per cent of the total population live in urban areas. The population of scheduled castes and scheduled tribes is 2,91,879 persons accounting for 18.64 per cent of the total population. The density of the population of the district is 363 persons per square kilometer. The total number of literates is, 8,48,127 (54.19 per cent). Workers constitute 47.9 per cent of the total population.\(^{49}\)

From the statistical figures, it is noted that more than 60 per cent of the population is living in rural areas and the educational level of the district has improved to a considerable extent. Above half of the population is able to read

---

and write. Further, even today more than two-thirds of the workers derive employment from agriculture and its allied activities.\textsuperscript{50}

\section*{1.9 \hspace{1em} CHAPTERISATION}

The present study entitled \textbf{“Customer Relationship Management in Banking Sector”} has been organised into six chapters.

The first chapter \textquote{Introduction and Design of the Study} introduces the subject, and the role of bank in marketing and customer services in public and private sector banks. Further, it covers review of literature, statement of the problem, objectives, methodology adopted, profile of the study area and chapterisation.

The second chapter \textquote{Customer Relationship Management in Banking Sector – An Overview} describes the development of banking sector, the kind of relationship marketing strategies adopted by Indian Banks in view of rapidly changing and highly competitive environment.

The third chapter \textquote{Growth and Development of Public and Private Sector Banks} discusses the number of branches, growth of deposits, advances and C-D ratios.

\textsuperscript{50}Unpublished Records of District Educational Office, Virudhunagar, 2006, p. 10.
The fourth chapter “Socio-economic profile of the customers and their level of Perception towards Customer Relationship Management”, deals with the level of perception and relationship between profile factors of the customers and their level of perception.

The fifth chapter “Perception of customers towards Customer Relationship Management - A Comparative study” examines the consistency in identified factors of perception of customers towards Customer Relationship Management in public and private sector banks.

The sixth chapter “Summary of Findings, Suggestions and Conclusion” presents the major findings of the study and to offer suggestions based on the findings of the study.