CHAPTER II
REVIEW OF LITERATURE

A detailed review of literature has been made to find out prevailing researchable gap and to identify the relevant issues for the study. This chapter provides a sketch of available related studies arranged chronological order. A brief literature would be of immense help to the researcher in gaining insight into selected problem. The researcher would gain good background knowledge of the problem by reviewing certain studies. A reference to these entire studies will be related in the contest of the shaping the present study.

Ward and Mullee (1997)\(^1\) in their study opined that reliability, availability, security, assurance, simplicity and flexibility as criteria of service quality. They argued that, from customers’ perspective, it is not appropriate to separate cellular network quality from the other dimensions of quality.

Requelme H (2001)\(^2\) studied Consumer needs and wants. A study conducted in the year 2001 was based on six attributes namely connection fee, access cost, mobile-to mobile phone rates, free calls, call rates and telephone features. The author stated that the customers with prior experience about a product can predict choice, however respondents overestimate importance of features, call rates, free calls and underestimate importance of monthly access fee, mobile-to-mobile phone rates and connection fee. He concluded that the study by stating that the market leader has to forecast future consumer needs, make use of new technology
and offer innovative products to consumers in order to maintain the leadership position in the industry.

Leisen and Vance (2001)\(^3\) in their empirical study compared the service quality in the telecommunication industry. SERVQUAL instrument seems to be the best fitting model of service quality in the U.S and Germany. Service quality is important to overall customer satisfaction with telephone services. Thus the authors suggest that this model can be applied in other countries too.

Ling (2001)\(^4\) reported that teenage girls talk more on their mobile phone than the teenage boys. However, the number of calls made in a day is almost the same for teenagers. Frequency of using mobile phones differs when the customers' age pass 20 years of age. At this stage, the gender difference is statistically significant in analyzing many functions.

Gerpott, et al., (2001)\(^5\) studied customer retention, loyalty and satisfaction in the German mobile cellular telecommunication market. They found that the three constructs, customer satisfaction, customer loyalty and customer retention are different. Customer satisfaction drives customer loyalty, which in turn has an impact on customer retention.

Lee, et al., (2001)\(^6\) attempted to study customer satisfaction and loyalty among residential customers in France. They segmented the customers into economy, standard and mobile lovers on the basis of calling time. They found that switching cost played a significant in monitoring role the customers' satisfaction –loyalty, between link and creating for economy and standard users.
Johnson and Sirikit (2002)\textsuperscript{7} made an attempt to examine the service quality of both fixed line and cellular mobile service in Thai telecommunication Industry. Service quality was assessed using SERVQUAL performed reliably modern in the industry.

Kasesniemi and Rautiainen (2002)\textsuperscript{8} attempted to study Mobile Culture of Children and Teenagers in Finland. They state that mobile phone is used to facilitate several functions. It helps users to know the news headlines, TV and movie listings, horoscopes, directory and address, weather forecast, sports scores and dictionaries. In addition, users can make inquiries about banking and flight or train schedule. Users are increasingly performing message collecting, circulating chain messages and collective writing and reading the messages. Many young people copy their messages into calendars, diaries or special notebooks designed by handset manufacturers.

Skog (2002)\textsuperscript{9} stated that young people frequently use mobile phone for calling, messaging and several other functions such as downloading software, playing games and listening to music, updating news and sports scores. It is important to mention that consumers differ in terms of using the mobile phone, where the frequency of use is determined by several demographic and behavioral variables.

Ling and Yttri (2002)\textsuperscript{10} have found out that out of his study, The mobile phone is used by young people to coordinate activities as well as to organize a range of interactions taking place in one’s daily life. Consumers use more value added sending services (VAS) like use it to send and receive personal messages that range from birthday greetings to vulgar jokes. In addition, they also mention that the mobile phone has taken
multiple forms of entertainment and communication among young people. It is observed that mobile phones perform vast functions. Young people as mobile users, receive or make six to eight phone calls per day, and send or receive more or less, the same number of messages. Several other functions, which are mostly used, are: alarm, calendar, calculator, and exchange of new logons and ring tones. One of the important findings of the study is that young people have graduated fast in terms of using mobile phones for more than the basic functions of calling and messaging. Consequently, telecom service providers begin to use value added service to lure the tech-savvy youth. Similarly, handset manufacturers have started to incorporate vast number of attributes to position them in the market uniquely.

Ranweera and Neely (2003)\(^{11}\) investigated the effects on the service quality. They used SERVPREF with some modifications for service quality measurement.

They developed a holistic model by incorporating the constructs such as customer indifference and inertia into the retention model. Study showed rice perceptions and indifference moderated the relationship between service quality perceptions and customer retention.

Wilska (2003)\(^{12}\) conducted a research work with the sample of Finnish students. She stated that, the use of mobile phone was not an isolated part of young people’s life styles. It is associated with their general consumption pattern. There has been a significant gender difference in mobile phone usage pattern. Girls do not use mobile phone device as frequently as boys use it. They are more suspicious to adopt the new technology than their counterpart. They have been instructed by boys how to use the equipment.
Though there has been an increase in media consumption by women, yet a significant difference exists in the usage pattern between the male and female users.

Apoorva Palkar (2004)\(^1\) in her empirical study attempted to know the determinants of customer satisfaction for cellular service providers and examined the relationship among the service quality, customer satisfaction and payment equity for the services provided by cellular service providers. The sample size of the research was 400. The author concluded that customers set the service quality among the components of service performance as the important criterion to determine behavior intention. The author also mention that service quality includes elements like coverage, connectivity and voice clarity, which are it strongly correlated with the technical limitation of the mobile subscriber network as well as service providers’ own infrastructure.

JD Power's Mobile Phone Survey (2004)\(^2\) a customers' satisfaction with mobile telephone service in Japan was study conducted among 7500 individual mobile telephone service users. The study concludes by stating that the important dimensions of service quality of mobile service providers included handset, price, quality of call, coverage area, non-voice functions and services, and customer contact strength in that order of priority.

Neeru Sharma and Satinder Ojha (2004)\(^3\) study developed and validate a psychometrically sound multi-item measure of service performance in mobile communications. A pool of 16 items was developed to cover the hypothesized multiple aspects of service performance and tested using a sample of 120 customers. The construct validity of the multi-aspect
service performance measure was evaluated by the author through assessing convergent, discriminate and predictive validity.

Kim, Park and Jeong (2004)\textsuperscript{16} investigated the effects of customer satisfaction and switching barrier on customer loyalty in Korean Mobile Telecommunication Services. Service quality has positive impact on customer satisfaction; study revealed that call quality is the most important issue that impact customer satisfaction for mobile services. Customer satisfaction and switching cost barrier has positive impact on customer loyalty.

Tung Lai Lai (2004)\textsuperscript{17} studied on the service quality and the impact of perceived value on satisfaction, intention and usage of Short Message Service (SMS). The study examines how the service quality of the service providers and perceived value of the customers affect customer satisfaction and how customer satisfaction affects their behavioral intention to continue to use SMS, which in turn affects the extent of SMS usage in the local context. Using the Partial Least Squares Regression, an analysis was conducted based on 150 surveys collected for testing the proposed relationships. The results of the survey showed that the dimensions of the service quality, i.e., tangibility, empathy and assurance are antecedents of customer satisfaction and positive relationship exists between customer satisfaction and customers’ intensions to continue to use SMS.

Grestheimes O and Lapp C (2004)\textsuperscript{18} attempts to study Needs Versus Technology. The challenge to design third generations mobile applications. The authors states that all mobile phone service providers operate in a
turbulent environment of enormous competition. Every market is different from each other in terms of technological maturity and market maturity. It is very important for mobile phone service companies to understand factors, which are related to brand choice. They mention that customers are of two types. Some of them are first users while others have an intention to continue or change their service providers. The market of mobile phone is a technology – push driven market where products are created ahead of the existing needs of the customers.

Karjaluoto H, et al., (2005)\textsuperscript{19} have studied factors affecting consumer choice of mobile phones in Finland. The objective of the study was to examine the important aspects of mobile service, which a customer considers for selecting a specific brand. The authors believe that current study will be helpful to the service providers in understand different segments of customers and to provide right mix of services for each cluster of customers.

Ozer and Aydin (2005)\textsuperscript{20} study was undertaken in Turkey, to determine the National Customer Satisfaction Index of mobile phone users based on sample of 1950 mobile phone subscribers. The dimensions that emerged in customer satisfaction included meeting customer’s pre-purchases expectations, perceived quality (coverage, responsiveness to customer’s complaints, value-added services, promotional activities and their fulfillment) and complaint handling.

S Revathi and S Padmavathy's (2005)\textsuperscript{21} empirical study examined customers’ preference in cellular service providers in the post liberalization era. The objective of the study was to examine the factors influencing the
user’s choice of cellular service providers and also to find out the problems faced by users of cellular service. The sample size of the study was 200. The findings of the study stated that, sample respondents prefer to have cellular connection due to low service charge than Department of Telecommunication Service (DOT) and it is more convenient to contact and improve their own business profession.

Sanjeev Panandikar and Rahul Rajput (2005)\textsuperscript{22} analytical study compared service quality of various mobile operators. They study considered various parameters like service quality, service standards, customers’ expectations and company offerings. The sample size of the study was 295. They found that Prepaid and Postpaid users for Mobile operators with various service quality attributes does not show any big difference in satisfaction levels. The consumers are aware of the service element and they do not find any hierarchy among the operators.

Seth, et. al., (2005)\textsuperscript{23} study focused on the customer loyalty and retention in cellular mobile communication. In this study, literature review was carried out covering the theoretical and empirical work on the subject and exploring the relations with service quality. The authors used random sampling method to collect data. They concluded the study by stating that a consensus is emerging among service providers and researchers that customer loyalty is vital for cellular mobile service providers to survive. Accordingly, the service providers in conducting customer satisfaction surveys among their existing customers place an increasing amount of attention to learn about customers’ perception, technique to retain them and service them through better means.
Sigala (2006)\textsuperscript{24} noted, in an empirical study conducted in Greece, that customization of service, pleasing interaction of staff and, company’s image among the customers and differentiated features were the important dimensions of service quality of mobile phone users.

Extended Performance Satisfaction Index (EPSI) (2006)\textsuperscript{25} undertook study of mobile phone customer satisfaction about quality dimensions in Finland and other Scandinavian and Baltic countries. The study states that the important drivers of customer’s perception of quality emerged product and service in Scandinavian and Baltic countries. The results comment that the significant aspects of quality of services included attributes of service, image of the operators, and value added services. Pricing of the services emerged as the most important dimension of quality.

A Selvarasu, et.al. (2006)\textsuperscript{26} study analyzed the service quality of the cellular service sector with reference to the emerging competition from the Code Division Multiple Access (CDMA) mobile service. The assessment of the quality of service was based on the available SERVQUAL inventory. The basic telephone service has also been included to draw a comparison of the existing services. Out of the 63 respondents, 54 have been included for further analysis. The overall assessment of quality of service (QoS) shows that Aircel has done well during the study period, i.e., September-October 2004. In the BSNL mobile service, responsiveness and empathy have been found as the limiting factors for the deviations; whereas in the case of Airtel, tangibility and responsiveness have good support for QoS. The study concludes by stating that reliability, assurance and empathy have been the power of Airtel in providing quality of service.
Srikant A (2006)\textsuperscript{27} in his research work had analyzed the cellular mobile industry of India. The exponential growth of the cellular mobile industry can be attributed to the introduction of digital cellular technology and decrease in tariffs due to service competition. A complete SWOT analysis, application of Porter’s ‘five forces model’ to cellular mobile industry and a marketing strategy framework of the Global System for Mobile (GSM) market are the highlights of this article. The article concludes that the cellular mobile industry is bullish in outlook. Experts acknowledge that the convergence of the mobile phone and the internet is a potential growth driver in the industry.

Banumathy and S Kalaivani (2006)\textsuperscript{28} aimed to identify the customers’ attitude towards cell phone services. The objective of the study was to formulate new strategies; policies for the service providers to market their services in a better way. The sample size of the study was 300 and they used simple random sampling method to collect data. The parameter used to measure level of satisfaction of cell phone services includes better service, attractive plan, network coverage, call rates and security deposits. The customers have given first priority to Aircel, second to BSNL, third to BPL, fourth to Reliance and fifth to Airtel. The author concluded that majority of the respondents have given a favorable opinion towards the services. The survey indicates that some problems exist that require the attention of service providers. They need to bridge the gap between the service promised and services offered. BSNL must improve the quality of services to compete with the private service providers. The overall customers’ attitude towards cell phone services is that they are satisfied with the existing services but still they want more services to be provided in near future.
M Ashok Kumar (2006) studied on satisfaction level of Airtel Mobile Phone Users. The objective of the study focused different factors influencing the customer satisfaction and to provide frame of reference for evaluating the gap between expectations and perceived performance by Airtel cell services. The study also summarizes the consumers purchase behaviour and identify the expectations behind the purchase of Airtel mobile phone services. For fulfilling the stated objectives the researcher used simple random sampling method and the sample restrained to too respondents. The finding of the study states that Population, which is less than 30 years of age, is more interested in using Airtel connections. The customers were found to be very much satisfied with the Clarity of Voice, Payment Accuracy and Activation Time and after sales services offered by Airtel.

Shibahish Charaborty and Dilip Kumar Charaborty (2006) attempt to make a study on demographic factors affecting brand choice of customers and identified important aspects of mobile phone service which affect choice of brands. With a sample of 345 respondents, the authors applied Simple random sampling method for data collection. The study concluded that age and monthly income influence brand choice of customers. It is very important for service providers to understand customer’s perception. The study also reveals that customers who are matured users or perfectionist users consider choice of packages and tariffs available, choice of services, cost of overall service and cost of calls to other networks as important factors for making a brand choice.
M Chinnadurai and B Kalpana (2006)\textsuperscript{31} in their study on “promotional strategies of cellular service” analysed the awareness about promotional tools and the impact of promotional tools on customer choice and their preference. The findings of the study stated that majority (95 per cent) of the respondents are aware of the cellular services through advertisement media. Among various Media of advertisement like newspapers and magazines, notice and brochures, posters and banners, radio, net services are very popular among the sample population. Majority of the respondents are aware of cellular services through television media. They also found that the advertisements play a dominant role not only in influencing the customers, but also remain as leading tool. Advertisements play significant role in the purchase decision of customers.

R Vijay Kumar and P Ruthra Priya (2006)\textsuperscript{32} studied the level of satisfaction derived by the subscribers of Airtel network on its various services and to find out factors that influence the satisfaction derived by the subscribers in Coimbatore city. The authors conclude that the improvement in quality of service of this network will attract more new subscribers and would help to retain the existing subscriber’s in the future competitive market.

Shirshendu Ganguli (2007)\textsuperscript{33} investigated those parameters that affect customer satisfaction and that in turn, along with other parameters affect the customers’ churn tendency. The author used Convenience sampling method. They collected data from Kolkata and Hyderabad. A total of 200 final survey questionnaires were distributed and 118 were collected back. The author, through his study concluded that youth are always less satisfied and maturity
comes with age and so, the aged customers are more satisfied. Young people are more likely to experiment with cellular services and try out various available options. Also with the increase in education level the judging power of customers’ increases and so satisfaction comes down, as they judge the services with more knowledge. It is easier to satisfy less educated and hence less informed people.

Bhagaban Das and Sangeetha Mohanty (2007)\textsuperscript{34} opined that India cellular end using would grow at a much faster pace due to high penetration of mobile phones, which resulted in instant access to information at any time and place. The adoption of mobile phones has been exceptionally paid in many parts of India and especially in Balasore (Orissa), where cellular phones are nowadays almost as common as wristwatches. While usage of cellular service is rather an unexamined field in academic literature, this investigative study attempts to examine consumer-buying motives in cellular services in the town of Balasore. Empirical work surveyed 150 consumers and examined mobile user’s motives in choosing a new cellular service provider on the other hand and factors affecting operator choice on the other. The result of the study indicate that for gaining customers’ trust, cellular operators should care more for better network, better customer care, and good services.

Mazzoni (2007)\textsuperscript{35} in his research work had analyzed the Consumer Behavior in the Italian Mobile Telecommunication Market. The author comments that mobile phone is not just a substitute of landline telephone, but more than that. Users can use it not only for calling and messaging but for sending pictures, updating sports and news, playing games, listening
music, watching movies, photography, transferring data and pictures, doing calculations, reminding important days and organizing their day to day activities.

Girish Taneja and Neeraj Kaushik (2007)\textsuperscript{36} aimed to deduce the factors that customers perceive to be the most important while utilizing the services of a mobile service provider. A well-structured schedule was developed for conducting the study, and it was conducted at Bhiwani and Hisar districts (including some villages) in the state of Haryana during February-March, 2007. Judgmental sampling method was followed. Data was suitably tabulated on the basis of responses provided by 186 respondents and further by calculating percentages, frequencies and factor analysis method. The mobile features, call rates and promotion and availability in the same order of importance. Moreover, hypothesis testing reveals that customers perceive these factors in a similar order of importance irrespective of sex, qualification, profession and marital status. Customers having less than 20 years and income less than Rs. 10,000/- are more sensitive to call rates as compared to other respondents. Finally, it can be said that better customer care services and service features, especially strong network range are most important for retaining the customers in mobile services.

Sukumar (2007)\textsuperscript{37} measured the mobile phone users’ preferences for selection of an operator by using a sample of 104 mobile phone subscribers. The result of the study found important dimensions as brand image, customer care, services quality, credit facility for connection, deposit amount, and prices in that order of priority.
The Directorate for Science, Technology, and Industry (DSTI) (2007)\textsuperscript{38} undertook a study in 2007 on Customer Satisfaction in Telecommunication markets in the Organization of Economic Cooperation and Development (OECD) countries Committee on Consumer Policy. The study found that imperfect information on quality and price, lack of transparency in roaming charges for international in service and contractual binding in changing the operators affect consumer behaviour. The study focussed on mobile phone users and identified and found that quality of service and price were two major factors for switching over to new operators. The study further highlighted, that major factors affecting mobile phone users’ dissatisfaction included lack of differentiation in United Kingdom, prices and quality of services in Portugal, early termination fee and unsolicited calls and inaccurate billing in United States, and lack of meeting and exceeding customer’s satisfaction in Australia.

Varadharajan Sridhar (2007)\textsuperscript{39} comments in his empirical study that penetration of mobile services is not uniform across the country. While some areas of the country have experienced exponential growth, the other areas, especially economically disadvantaged, have very low mobile density. This mobile divide is a serious concern for government, policy makers and telecom operators. Predicting growth of subscriber base across regions of the country is critical for all stakeholders. The study aims to better forecast the penetration of mobile services across regions of the country so that their effect on economic development can be further explored and policies can be formulated to reduce the mobile divide.
Anita Seth, K Momaya and H M Gupta (2008) in their research, developed a valid and reliable instrument to measure customer perceived service quality incorporating both service delivery as well as technical quality aspects. Through a survey of 225 regular users of cellular mobile services and they used Convenient sampling method. It was concluded that SERVQUAL is not a generic scale. Thus, in case of cellular mobile, service quality needs to be measured using a seven-dimensional (reliability, assurance, tangibles, empathy, responsiveness, convenience and customer perceived network quality) structure.

Muhammad Mohsin Butt and Ernest Cyril de Run (2008) aimed to study the factors, that contribute to customer satisfaction in Pakistani Mobile Cellular Services. There is lack of studies and hence, relevant scales to measure customer satisfaction in mobile communication services. The researchers aimed to expand the body of knowledge by exploring factors, which contribute to satisfying the customers of Pakistani Mobile Cellular Service. A typical two-stage survey was conducted. In the first stage, a Qualitative research was conducted to collect factors, which contribute to the customer satisfaction to the customer satisfaction of a typical Pakistani Mobile Cellular user. It was followed by a questionnaire to gather quantitative data for further analysis. The results of the study confirmed a multidimensional construct of customer satisfaction in Pakistani mobile cellular communication sector. The finding of the study suggests that customer satisfaction of mobile cellular users in Pakistan to constitute four factors-Price, transmission quality, usage ease and service support to reap services from the service providers.
Manjaappa D H and Tayebeh Farahant (2008)\(^{42}\) have made an attempt to estimate the consumer surplus in mobile telephone services in India. The Indian mobile telecommunications market has grown rapidly since 2002, while competition was introduced and Code Division Multiple Access (CDMA) technology was commercialized. Because of controversy over establishing an appropriate price level between consumers and service providers, consumer surplus is relevant since it is a robust measurement of benefit from Mobile Telephone Service. The net consumer surplus has been estimated by means of elasticities of demand. In particular, after competition was introduced into the market with an accompanying price decrease and increase in number of subscribers, consumers have benefited greatly from mobile services in India. Therefore, it can be inferred that a facility–based competition policy and the reduction in price of access such as handset subsidies all played a positive role in the early diffusion of Mobile Telephone Service in India and benefit to the consumers.

Australian Communications and Media Authority (ACMA) (2008)\(^{43}\) conducted a qualitative (focus group) and quantitative (consumer survey) about customer satisfaction towards mobile phone usage. The study reported highest levels of satisfaction with mobile phone services (35 per cent), citing problems such as dropouts; poor calls quality and interference are focused as some of the issues faced by the mobile users.

Accenture (2009)\(^{44}\) carried a survey among 4189 consumers in Australia, Brazil, Canada, China, France, Germany, India, United States and United Kingdom. The study found that more than 67 per cent respondents confirmed poor customer services as the core reason for leaving the operators. The survey also found the rising expectations of customers in mature and growing markets has to be strategically tackled.
Evangelos Grigoroudis, et.al. (2008)\textsuperscript{45} made an attempt to examine customers satisfaction of major cellular service providers in Greece. The analysis is based on a multicriteria preference desegregations approach for satisfaction benchmarking analysis and consists of the following parts: (1) the user satisfaction analysis, which concerns the identification of customer preferences and includes the estimation of the relative importance and the demanding level of the different user satisfaction dimensions, and (2) the satisfaction benchmarking analysis, which is mainly focused on the performance evaluation of the competitive organizations against the satisfaction criteria, as well as the identification of the competitive advantages of each company. The results presented in this paper demonstrate how business organizations may locate their position against competition, and pinpoint their weak points.

Souki and Filho (2008)\textsuperscript{46} carried out a study based on 434 mobile users in Brazil. The study focused on satisfaction of mobile phone users. The results of the study indicated high rating for customers’ services, quality of connections, ambience of outlets, and the coverage service by various service providers.

Telecom Regulatory Authority India (TRAI) (2008)\textsuperscript{47} carried out quality of service survey of mobile operators based on users’ satisfaction. The sample consists of 1318 mobile phone users. The important dimensions of regulatory services included. Quality included billing, customer care, availability of network, value –added services and pre-sales dimensions. It has observed that out of 11 operators, only five operators achieved the 90 per cent service quality benchmark.
Subhash Jha (2008) has made an attempt to give a snapshot of how frequently young people use their mobile phones for several embodied functions of the cell phones. Data was collected from a sample of 208 mobile phone owners, aged between 20 and 29. The study sheds light on how gender, monthly voucher amount and years of owing mobile phones influence the usage pattern of this device. The findings of the study show that there exists significant difference in the usage pattern of mobile phones because three variables like age, usage and monthly billing. Findings of the study would be helpful for the telecom service providers and handset manufacturers to formulate a marketing strategy for different market segments.

Mayank Vinodbhai Bhatt (2008) study focused on the Mobile Phone Usage among the Post Graduate Students of the Sardar Patel University, Gujarat, India. The objectives of the study were to identify usable and desirable features of mobile phone and awareness of clinical effects of mobile phone usage. The finding of the study states that the users use four different modes of communications. The customers using direct call, messaging, missed call facilities and PCO. 32 per cent are aware about the clinical side effect of the mobile phones usage.

S K Sinha and Ajay Wagh (2008) analysed the growth of cellular Telecom Sector and Consumers Preferences and Choices on the use of cell phone in Jaunpur city of Uttar Pradesh. They found that BSNL is the dominant leading cellular operator in Jaunpur District and also the consumers prefer lower tariff, followed by better service or quality customer
service that includes politeness, responsiveness, promptness, caring and commitment towards the customer.

Raj et.al. (2009)\textsuperscript{51} in their research, examined customer satisfaction through importance-satisfaction matrix in Mobile Telecom Service Providers. The objectives of the study were to identify the factors influencing customer’s preference in choosing brands in mobile telecommunication market and to measure the customer satisfaction. Findings of the study state that Basic/service network performance is the most significant factor to be considered by Indian consumers. BSNL and Airtel should improve upon the basic services like voice clarity, SMS delivery, connection with other networks, and easy connectivity of calls, responsive and co-operative executives. Airtel customers were found to be very unsatisfied with the unwanted messages they receive from the service providers.

J D Power and Associates Survey (2009)\textsuperscript{52} studied the mobile phone users satisfaction in the United Kingdom. The study used a sample of 3325 mobile phone customers throughout United Kingdom. Important dimensions of service quality included in the survey were coverage, call quality, promotions and offerings of incentives and reward prices of service, billing, customer, bundled services. The study showed rising customer expectations with regard to the additional features and services from the mobile operators.

B B Mansuri and Shahina Praveen (2009)\textsuperscript{53} made an attempt to study customer relationship management of Airtel. The authors believe that CRM
not only improves the service to customer though; a good CRM capability will also reduce costs, wastage and complaints. Effective CRM also reduces staff stress because attrition- major cause of stress reduces as services and relationships improve. The author also emphasize good CRM also helps to grow business; customers stay longer; customer churn rate reduce; referrals to new customers increase from increasing numbers of satisfied customers; demand reduces on fault finding and troubleshooting staff, and overall the organization's service flows and teams work more efficiently and more happily.

Shivani Sambyal and Sanjana Gupta (2009)\textsuperscript{54} aimed to study the role of CRM and penetration and awareness of value added services (VAS) of Airtel in Jammu City. There exists a vast world beyond voice that needs to be explored and tapped and the entire cellular industry is heading towards it to provide innovative options to their customers. The authors mention that spoilt by choice, the mobile phone subscribers are beginning to choose their operators on the basis of the value added services they offer.

Ling and Run (2009)\textsuperscript{55} made an attempt to study customer satisfaction and customer loyalty in Malaysian Telecommunication Services. The study was divided into two parts. The first part utilizes an in-depth interview method to obtain variables to be used; the second part consists of a questionnaire distributed to 125 respondents. Findings of the study indicate that important variables for satisfaction included, supporting services, product (handy, reliable coverage, friends and family lines) and promotional efforts of the firm. While for loyalty, they refer to convenience, services, satisfaction and cost. The findings also indicate that telecommunication service providers should look beyond price wars to keep their customers satisfied and loyal.
S K Chadha and Deepa Kapoor (2009)\textsuperscript{56} attempted to study the effect of switching cost, service quality and customer satisfaction on customer loyalty in the mobile telecommunication service. As many as 220 users of GSM services were surveyed in two cities in India. The data was analyzed by regression analysis. The study shows that switching cost, service quality and customer satisfaction have positive association with customer loyalty. However, the customer satisfaction was found to be the best predictor of customer loyalty.

V Vannirajan and Gurunathan (2009)\textsuperscript{57} studied on Service Quality and Customer Loyalty in Cellular Service Market. The authors comment that Indian cellular phone service market is becoming more competitive today. The success of the service providers depends on its capability to retain its customers and make them loyal to their brand. To examine the linkage between service quality and customer loyalty, the ‘Structural Equation Modeling’ has been used. The mobile phone users in Madurai were surveyed with sample of 627 users. The study shows that the service quality factors namely core service quality network quality and value added service quality have a significant positive impact on customer loyalty but through the customer satisfaction. Analysis results showed that perceived service quality is a necessary but not sufficient condition for customer loyalty.

Makam S Balaji (2009)\textsuperscript{58} in his study investigated the antecedents of customer satisfaction with Indian mobile services. The American Customer Satisfaction Index (ACSI) model is used as framework to examine the casual relationships among customer expectations, quality, value, satisfaction and
loyalty. The responses were collected using a structured questionnaire from 199 post-paid mobile subscribers in a major city in India. The results from structural equation modeling show that perceived quality is an important predictor to customer satisfaction, which ultimately results in trust, price tolerance and customer loyalty. The findings provide valuable managerial insights for managing customer satisfaction and loyalty that could guide many popular service providers.

Sarina Ismail (2009)\textsuperscript{59} in her study examined the effect between Consumer Satisfaction and Customer Loyalty in the Malaysian Mobile Telecommunication Services. The author opines that this sector is highly competitive as new players coming in, with aggressive price offering, high promotion, better network quality and great customer service. 157 respondents participated in this study. Out of five variable tested (service quality, switching cost and brand image) it is found that Responsiveness and Brand Image have a positive relationship in Customer Loyalty. This study has its own limitation since this research is only conducted in Penang area. Therefore the finding of the study is unable to be generalizing for the whole population of hand phone users in Malaysia, as the sample size is considered small. The author concludes the study by stating that service providers must be able to understand the effect between customer satisfaction and customer loyalty. It will be a great challenge for the service providers in preparing their strategic plan in maintaining customer loyalty and at the same time expanding their customer base.

Vinita Aura & Sunitha Verma (2010)\textsuperscript{60} studied on Service Quality in Telecommunications Sector. A comparative analysis was made between
BSNL and Airtel on the five principal dimensions of service quality, based on customer survey conducted in Rajasthan. The data was collected from engineering and management students. By using convenient sampling technique, a sample of 100 was chosen for Airtel and 77 for BSNL. The research instrument used for the study was the SERVQUAL model. The findings of the study showed Airtel is doing better on service quality than BSNL in Rajasthan and also the Airtel customers are satisfied with all dimensions of service quality.

Mallikarjuna and Dr G Krishna Mohan (2010) attempted to study customer-switching behavior. They conducted their study in the state of Andhra Pradesh with the sample size of 500 mobile users. The variables considered for the study were Customer demographics, usage rate, and Customer satisfaction with previous operator, reasons for switching. They concluded that Price escalation, changing needs of customers; core service failure, inconvenience and voluntary reasons are the factors influencing the mobile customers switch. Due to competitiveness pressures, the mobile operators in India, at one point of time, decreased the call tariffs abysmally low and later hiked them indirectly through the tariff plans. This forced the customers to look out for cheaper packages. Typically, the starter packages offered for new customers had the low call tariffs. The author specifies that core service failure is another factor that necessitated switching. Network related problems such as poor connectivity; low coverage etc. is also forcing the customers to switch to another operator who are perceived as better. Indian mobile operators have to invest in expanding network coverage and providing technically superior quality services to retain customers.
The elaborate discussion made in this section of the study drew a clear understanding based on the early studies that the liberalization of telecommunication industry has provided the necessary push to provide continuously superior customer services. The entry of global players has further added to the competitive pressure in India. This liberalization and globalization have posed a challenge to the telecom operators as how to create differentiation with almost the same network technology with all the cellular operators. Improving the quality of service delivery can enable the cellular mobile service providers to create differentiation in order to gain profitability and competitive advantage. In light of this, the paper attempts to look at the ways customer satisfaction towards cellular service providers in Coimbatore city.


47. Telecom Regulatory Authority India (TRAI) (2008); “Virgin Mobile Tops Regulator’s Service Benchmark: Survey”.


