CHAPTER -2

REVIEW OF LITERATURE

2.1 INTRODUCTION

The growth in demand for telecom services in India is not limited to basic telephone services. India has witnessed rapid growth in cellular, radio paging; value added services, internet and global communication by satel item (GMPCS) services. The agents of change, as observed from international perspective, have been broadly categorized into economic structure, competition policy and technology. Economic reforms and liberalization have driven telecom sector through several transmission channels of which these three categories are of major significance.

The effective research cannot be accomplished without critically studying what already exists in the form of general literature and specific studies. Therefore, it is considered as an important pre-requisite for actual planning and execution of research project. This helps to formulate hypotheses and framework for further investigation. In this research, the survey of literature has been classified into two parts - studies related to telecom sector and studies related to marketing and promotional strategies.

2.2 STUDIES RELATED TO TELECOM SECTOR

National Telecom Policy (1999) projected a target 75 million telephone lines by the year 2005 and 175 million telephone lines by 2010 has been set. Indian telecom sector has already achieved 100 million lines. With over 100 million telephone connections and an annual turnover of Rs. 61,000 crores, our present tele-density is around 9.1%. The growth of Indian telecom network has been over 30% consistently during last 5 years.
Videsh Sanchar Nigam Limited (VSNL) 16th Annual Report (2002) India like many other countries has adopted a gradual approach to telecom sector reform through selective privatization and managed competition in different segments of the telecom sector. India introduced private competition in value-added services in 1992 followed by opening up of cellular and basic services for local area to competition. Competition was also introduced in National Long Distance (NLD) and International Long Distance (ILD) at the start of the current decade.

World Telecommunication Development Report (2002) explains that network expression in India was accompanied by an increase in productivity of telecom staff measured in terms of ratio of number of main lines in operation to total number of staff.

Indian Telecommunication Statistics (2002) in its study showed the long run trend in supply and demand of Direct Exchange Lines (DEL). Potential demand for telecom services is much more than its supply. In eventful decade of sectoral reforms, there has been significant growth in supply of DEL.

Economic Survey, Government of India (2002-2003) has mentioned two very important goals of telecom sector as delivering low-cost telephony to the largest number of individuals and delivering low cost high speed computer networking to the largest number of firms. The number of phone lines per 100 persons of the population which is called tele-density, has improved rapidly from 43.6 in March 2001 to 4.9 in December 2002.

Braff, et al. (2003) focuses that telecom service providers even in United States face a sea of troubles. The outlook for US wireless carriers is challenging. They can no longer grow by acquiring new customers; in fact, their new customers are likely to be migrated from other carriers. Indeed, churning will account for as much as 80% of new customers in 2005. At the same time, the carrier’s Average Revenue per User (ARPU) is falling because customers have.
Dutt and Sundram (2004) studied that in order to boost communication for business, new modes of communication are now being introduced in various cities of the country. Cellular Mobile Phones, Radio Paging, E-mail, Voice-mail, Video, Text and Video-Conferencing now operational in many cities, are a boon to business and industry. Value-added hi-tech services, access to Internet and Introduction of Integrated Service Digital Network are being introduced in various places in the country.

A study by Jeanette Carless on and Salvador Arias (2004) wireless substitution is producing significant traffic migration from wire line to wireless and helping to fuel fierce price competition, resulting in margin squeezes for both wire line voice tariffs in organization for Economic Co-operation and Development Countries have fallen by an average of three percent per year between 1999 and 2003.

T.V. Ramachandran (2005) analysed performance of Indian Telecom Industry which is based on volumes rather than margins. The Indian consumer is extremely price sensitive. Various socio-demographic factors- high GDP growth, rising income levels, booming knowledge sector and growing urbanization have contributed towards tremendous growth of this sector. The instrument that will tie these things together and deliver the mobile revolution to the masses will be 3 Generation (3G) services.

Rajan Bharti Mittal (2005) explains the paradigm shift in the way people communicate. There are over 1.5 billion mobile phone users in the world today, more than three times the number of PCOs. India today has the sixth largest telecom network in the world up from 14th in 1995, and second largest among the emerging economies. It is also the world’s 12th biggest market with a large pie of $6.4 billion. The telecom revolution is propelling the growth of India as an economic powerhouse while bridging the developed and the developing economics.
Aisha Khan and Ruche Chaturvedi (2005) explain that as the competition in telecom area intensified, service providers took new initiatives to customers. Prominent among them were celebrity endorsements, loyalty rewards, discount coupons, business solutions and talk time schemes. The most important consumer segments in the cellular market were the youth segment and business class segment. The youth segment at the inaugural session of cellular summit, 2005, the Union Minister for Communications and Information Technology, Dayanidhi Maran had proudly stated that Indian telecom had reached the landmark of 100 million telecom subscribers of which 50% were mobile phone users. Whereas in African countries like Togo and Cape Verde have a coverage of 90% while India manages a merely mobile coverage of 20%.

An overview in Indian infrastructure Report (2005) explains India’s rapidly expanding telecom sector is continuing to witness stiff competition. This has resulted in lower tariffs and better quality of services. Various telecom services-basic, mobile, internet, national long distance and international long distance have seen tremendous growth in year 2005 and this growth trend promises to continue electronics and home appliances businesses each of which are expected to be USD 2.5 billion in revenues by that year. So, driving forces for manufacturing of handsets by giants in India include-sheer size of India market, its frantic growth rates and above all the fact that its conforms in global standards.

Marine and Blanchard (2005) identifies the reasons for the unexpected boom in mobile networks. According to them, cell phones, based on Global System for Mobile Communication (GSM) standard require less investment as compared to fixed lines. Besides this, a wireless infrastructure has more mobility, sharing of usage, rapid profitability. Besides this, usage of prepaid cards is the extent of 90% simplifies management of customer base. Moreover, it is suitable to people’s way of life-rural, urban, and sub-urban subscribers.
Illustrating the lead achieved by Gujarat, according to Business and Economy (2005) the catalyst for Indian mobile operators in the future will undoubtedly be increased marketing and advertisement expenditure, along with better deals for mobile phone users like the previously mentioned full talk time Rs. 10 recharge card, will go a long way in not only retaining customers but also acquiring the vast market of lowered customers who are extremely sticky about value for money and have extremely low loyalties and almost non-existent switching costs.

According to Oliver Stehmann (2005) the telecommunications industry is characterized by rapid innovation in the service and the transmission market. The legally protected public or private monopolist does not have the same incentive to foster innovation that would exist in a competitive environment. Thus, state intervention based on the natural monopoly argument neglects dynamic aspects, which are crucial in the telecommunications sector.

Marketing White book (2005) explains with support of detailed data that bigger players are close to 20% of the market each. In CDMA market, it is Reliance Infocom and Tata Teleservices are dominating the scene whereas Airtel is lead in GSM operators. Between 2003 and 2004, the total subscriber base of the private GSM operators doubled. It rose from 12.6 million subscribers at the end of March 2003 to 26.1 million by the end of March 2004. And yet that 100% growth rate notwithstanding, total industry revenue for 2003-04 was around Rs. 8308 crores. Compared to Rs. 6400 crores that industry grossed in 2002-2003, that is an increase of 30%.

2.3 STUIDIES RELATED TO SERVICES QUALITY

2.3.1 Services

There has been substantial growth in the services sector during the last two decades. This rapid growth has been attributed to changes in environment,
fast development of new technologies and computerization, changing customers’ preferences and lean manufacturing (contracting out most activities). The change in demography, culture and lifestyle had affected the consumption pattern and buying behaviour of people. This change created new opportunities and challenges for the firms to remain competitive.

Cronin & Taylor, 1992; Gammie, (1992) Guru, 2003 Hallowell, (1996); Newman, 2001 The evaluation of service quality is based on customers’ and service providers’ perception of quality. The service concept has two components; the degree to which customer needs are satisfied and the added value that the customer receives.

Dale 2003; Hsieh, Chou & Chen (2002)estimated that 44% of people in firms are looking at after service functions. The contribution of these people adds value to the quality of products and the firms’ perception in the minds of consumers.

2.3.2 Service Quality


Johnson & Sirikit, (1993) According to the author the service quality is an attitude that results from comparison of expected service level from perceived performance. The consumer evaluation of actual performance with the expected performance results in perceived service quality.

Cronin & Taylor, (1992) Kordupleski, Rust & Zahorik (1993) gave a suitable definition of service quality as the “extent to which the service, the service process and the service organization can satisfy the expectations of the user.”
Parasuraman, et al. (1985) defined service quality as a “measure of how well the service level delivered matches customer expectations. Delivering quality service means conforming to customer expectations on a consistent basis.” They noted the properties of services as follow:

1. Search properties that can only be done before consumption.
2. Experience properties that can only be evaluated during or after the consumption.
3. Credence properties that cannot be directly evaluated before or after the consumption.

Cronin and Taylor (1992) & Reichheld and Sasser (1995) stated that service quality leads to customer satisfaction which affects the purchase decision proposed that loyalty of customer increases with high level of satisfaction and affirms that “customer satisfaction leads to customer retention.”

Geralis & Terziovski (2003) According to the author the service quality involves a comparison of customers’ expectations with customers’ perceptions of the actual service performance. Customers expect quality service that considers their needs and improves their quality of life.

Based on examinations of writings of quality experts and researchers, Parasuraman et al. (1985) identified that the underlying theme of service quality is based on the following:

1. It is difficult for the consumers to assess the service quality as compared to the goods quality.
3. Assessment of service quality is based on the outcome of service as well as the process of service delivery.
2.3.3 Service Quality Dimensions

Gronroos (1984) these are characteristics of service that are essential to customers and contribute significantly to the evaluation of quality. Researchers have tried to identify generic attributes that can facilitate evaluation of quality in specific context. Identified three components of service quality namely; technical quality, functional quality and the corporate image.

Lehtinen (1982) identified three dimensions of quality that include physical dimension, corporate dimension and interactive dimension. They argued that delivery of service and the outcome are vital determinants of service quality.

Garvin (1984) identified eight customer oriented quality dimensions that include performance, features, reliability, conformance to specification, durability, serviceability, aesthetics and perceived quality.

Dotchin and Oakland (1994) observed that, in services that provide much interaction with consumers, essential attributes of service quality are competence, credibility, security and knowledge.

Parasuraman, et al. (1988) identified some generic dimensions of service quality in a 22-item scale, called ‘Service Quality’ (SERVQUAL), which measures service quality based on five dimensions, which are tangibles, reliability, responsiveness, assurance and empathy. In addition to the focus on the five dimensions incorporated into the SERVQUAL, the other dimensions that they proposed are communication, credibility, security, competence, courtesy, and understanding/ knowing the customers and customization. Customers view core service, delivery, system of delivery, tangibles and social responsibility as the most critical factor to determine the service quality.
2.3.4 Quality Of Service Dimensions – Mobile Phone Customers’ Perspective

Teril (2009) indicated that world wide mobile phone subscribers would increase to 5.2 billion by 2011. The revenues from mobile services are expected to grow from USD 624 billion in 2007 to USD 877 billion by 2013. The rapid growth offers opportunities and challenges for the mobile phone operators. Customers experiences based on quality has assumed decisive role in sustainable competitive advantage for mobile phone operators.

Accenture (2007) there is strong evidence from Australia, New Zealand and India that organizations suffer economic losses and loss of customers due to poor customer services.

The combined loss is estimated to be about USD 5.6 billion in revenues (Ponder, 2009). Quality of services from mobile phone users’ perspective needs to be studied with a view to facilitate its measurement. There have been numerous studies that investigated the perspective of mobile phone users with regard to the quality aspects. These have been discussed in succeeding paragraphs. These studies provide insight to the quality dimensions that mobile phone operators need to consider remaining competitive in changing environment.

Akbar and Pervez (2009) carried out a survey based research of 304 subscribers of a telecommunication company in Bangladesh. The results found that tangible, empathy; assurance, reliability and responsiveness were considered the main dimensions of quality for customer satisfaction.

Prabhudesai, (2009) In a survey conducted in 2009, Indian mobile phone users indicated diversity of services, reliable customer services and reasonable pricing as the main features of quality of service.

J.D. Power Survey (2009) studied the mobile phone users’ satisfaction in the United Kingdom. The study was based on 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 rewards, 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. Based on the survey of 22052 users of wireless phone in United States in 2008, the Wireless Phone Users' Satisfaction Index of United States of America indicated that important dimensions of service quality were based on customer satisfaction, billing, and brandimage; call quality, cost of service and options for service plans (Customer Satisfaction Index, 2009)

In Pakistan, PTA regularly monitors the quality of services of mobile telephone operators through quality of service survey. The quality of service parameters include network accessibility, service accessibility, access delay, voice quality and short message service (PTA, 2008). In Pakistan, no empirical investigation or study has been undertaken to assess the quality of service based on customers’ perception.

A qualitative (focus groups) and quantitative (consumer surveys) research study about consumer satisfaction was undertaken by Australian Communications and Media Authority, ACMA (2008). The study reported highest levels of dissatisfaction with mobile phone services (35 per cent), citing problems such as drop-outs, poor call quality and interference. The research also highlighted the growing number of complaints to Telecommunications Industry Ombudsman during the period 2002 to 2007 about the telecommunication services.

Souki and Filho (2008) carried out a study based of 434 customers in Brazil. The study focused on satisfaction of mobile phone users. The results of the study indicated high rating of customers’ services, quality of connections, overall ambience of outlets, and the coverage provided.
**Joachim and Omotayo** (2008) In a study in Nigeria, based on a sample of 150 mobile phone users, identified convenience, competency of delivery personnel, reliability, facilities and attractiveness of features of service and tangibles as important determinants of service quality.

**Chi, Yeh and Jang** (2008) noted, in a study of 127 mobile phone users, that coverage and reduction in service charges are essential elements of quality for retention of existing customers and attracting new customers.

**Barnhoorn** (2006) carried out a study in 2008 in South Africa indicated the ever-increasing expectations of customers with regard to the services of mobile phone operators. The salient dimensions of quality of service accorded priority by mobile phone users included courteous and facilitating role of front line personnel, ease of availability for cards and recharge services, availability of products and services at the company outlets, accurate information and facts about services, affordable prices of the packages, and customized services.

**Lim & Kumar** (2008) carried out a study in United States based on a sample of 298 mobile phone users of two age groups (college students and old age group). The study found that quality and reliability of network, billing services and customer services found to be essential attributes of service quality of mobile phone services that contribute to economical and emotional value that lead to satisfaction of customers in different age groups.

**DSTI**, (2007) The study found 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 behavior. The study focused 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.

Kim, Park & Park, (2007) In Korea, a study of 350 mobile phone user indicated interpersonal relationship, ability of service provider to solve problems and attractiveness of services have been viewed as important dimensions of quality for mobile phone users. The respondents show great concern for high switching costs.

In 2006, Telecom Regulatory Authority in India carried out survey of mobile operators against benchmark quality of service. The salient dimensions of service quality included call set up rates, drop call rate, accumulated down time for community isolation, services access delay, blocked call rate, quality of voice, time taken to response to customers for services, complaints per 100 bills issued, percentage resolution of complaints within four weeks, and time taken for all refunds / payments to customers after resolution of complaints.

Serenko and Truel (2006) In an empirical study in Canada, found that differentiated services were rated as the top element for competitive quality of service of mobile phone users.

Denmark, Sweden (2006) A study of mobile phone customers satisfaction about quality dimensions was undertaken in Finland and other Scandinavian and Baltic (Lithuania and Latvia) countries. The important drivers of customers’ perception of quality emerged product and service in Scandinavian and Baltic countries. The results found that the significant aspects of quality of service included attributes of service, image of the operators, and value added services. Pricing of the services emerged as the most important dimension of quality.

Chich, Tang and Chen (2006) In a study was carried out in main land China, based on a sample of 367 customers of mobile phone users focused on the
users’ perception of service quality. The study found convenience, price, service transfer facilities, and behavior of staff, internet connectivity, and quality of system as the major attributes of service quality.

**Sigala (2006)** noted, in a study of mobile phone users in Greece, that customization of service, pleasing interaction of staff and customers, company’s image and differentiated features were the important dimensions of service quality of mobile phone users.

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

Quality of Service Parameters adopted by Uganda Communication Commission (a regulatory body of communication in Uganda) for mobile phone service operators include network availability, call drop rate, call block rate, accuracy and on time issue of bills, complaints handling, service activation, provisioning and restoration.

**Gerpott (2005) & Lee, Feick and Lee (2001)** Based on empirical studies, found that satisfaction of mobile phone customers is strongly influenced by the pricing plans.

**Consumer Reports**, (2005) found that network quality based on data services and voice services strongly influence customer satisfaction and loyalty with regard to the mobile phone usage.

**Lee, Feick & Lee**, (2001) In France, a study was carried out based on a sample of 265 mobile phone users. The results of the study indicated that main dimensions of customer’s satisfaction were pricing plan, coverage and call quality, ease of access and billing services.
With these insights regarding the services and functioning of telecom sector services, no there is a further look into the world scenario of telecom players as well as Indian scenario in telecom.

Keeping the present scenarios of mobile network providers which is presented in chapter 1, in mind and further study into these literatures suggests that there will be a definite change in the lead places that China mobile and Airtel holds right now. The reasons are

1) Asia Pacific Consumer Satisfaction Survey (2008) indicated that in mature markets, the customer services along with long wait time were cited as the major reasons for leaving the operators. The survey found price, poor voice quality, unsatisfactory customer services, slow response to customers’ complaints resolutions, inadequate coverage, less variety of service features, poor reliability and lack of bundled services as the major reasons for switching over to new operators in China and India.

2) Accenture (2008) carried out survey of 4189 consumers in Australia, Brazil, Canada, China, France, Germany, India, United States and United Kingdom. More than 67% 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.

3) Singh (2008) argued that the unprecedented growth of subscribers in India poses challenges to operators to ensure quality of services based on customer care, price, billing and new applications to meet ever increasing customers’ demands.

As per tables 2.1 and 2.2, Vodafone has huge potential in India and worldwide, in addition to being a fully owned foreign company. This gives a lead to look into the literature related to Vodafone and its services.
2.5 Vodafone Related Study

Vodafone is a largest mobile phone company providing voice and data services to a customer base of over 18.5 million customers in United Kingdom. The company pursues quality management practices to achieve performance excellence in dynamic competitive environment.

Vodafone (2009) leadership views customers’ and employees’ satisfaction at the heart of their business, making profit in a way that maximize the positive and minimizes the negative and provide best benefits to the customers and employees. Pursues customer satisfaction through fast, reliable and safe network, great value tariffs, innovative mobile services, product and services that promote flexible working, customers’ safety online, privacy and security of data, favorable prices, and information about mobile phone technology, health, regular meeting and feedback. The Company manifests its commitment in providing innovative and differentiated products and services though constant feedback from customers and responding to the changing environment. This alignment is achieved through constant focus on managing processes effectively and pursuing continuous improvement in company’s products, services and processes to delight customers and meeting environmental challenges. The mobile operator has undertaken initiatives to help customers to become greener through development and provision of smart metering, by 2012, for business and residential customers

Vodafone (2009) emphasizes a strategic and collaborative approach in suppliers’ Relationship. The relationship with suppliers is guided by operator’s Code of Ethical Purchasing. The important dimensions include human rights, child and forced labour, working conditions, freedom of association, bribery and environmental management. All major and new suppliers must confirm compliance. The operator expects major suppliers to conform compliance company’s health and safety, fraud management and duty to report policies. It is
important for the suppliers to adopt these practices since any failure in supply chain can affect operator’s brand.

**Vodafone** (2009) the operator constantly strives to create an environment where everyone can succeed and flourish. Managing a diverse workforce of over 10,000 members offers opportunities and challenges. Starting with commitment from the top, the mobile operator has created an environment of employee engagement and advocacy with equal opportunities for all at all levels. The main aim is to attract and retain the best people, to build a diverse team that firm supports with training and development throughout their career. There is a great focus on team building and collaborative working to create synergy. The company spent Pound Sterling 3 million on training and development related activities of the workforce. The operator also trained 6,000 customer service and retail staff to use new Strategic Customer Management tool that enhances efficiency and effectiveness. The operator recognizes employees’ great achievements and that everyone is fairly rewarded, and that everyone has a voice – and it will be heard. The company is committed to communicate clearly, openly and honestly, and handle the really tough issues – like redundancy –with professionalism and empathy.

Vodafone (2006) noted that provision of training helped employees reach their full potential and benefited the organization. The company undertook initiatives in tailoring development support to individual needs; provided approximately 287,000 training days – equivalent to 5 days training per employee – in 2006/07 and spent approximately £29 million on training covering 91% of employees. The results were extremely positive.

**Telenor** (2006) noted positive impact of training and development on individuals and the organization to create value for customers.
Telenor (2006) continues to challenge itself to improve internal standards, the way it works with partners, and to manage the impact of its services and operations.

China Mobile (2006) strives to improve customer services and enhance organizational ability to meet customer needs and improve customer privacy policies and procedures.

Vodafone (2006) noted that it “value its long term commitment with customers and believes that it should always act to earn their trust and loyalties our communication with our customers are always to be clear, transparent and fair.”

Telenor, (2006) noted that “ongoing effort to strengthen customer focus in every part of the business.”

Ruhli (2007), in a case study of comparison of stakeholders’ involvement in three firms in the Swiss telecommunications industry, noted that good stakeholder’s relations affect business performance and create a win-win situation.