Chapter-2:

LITERATURE REVIEW
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2.1: STUDY RELATED TO TELECOM SECTOR
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 satellite (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 strategies.

2.1.1: STUDIES RELATED TO GROWTH AND DEVELOPMENTS IN INDIAN TELECOM SECTOR

Muller (1990)\(^1\) in his a research focuses that the success of the mobile commerce can be attributed to the personal nature of wireless devices. Adding to this are its unique features of voice and data transmission and distinct features like localization, feasibility and convenience. The sustained growth of the mobile commerce around the world has been more because of the transfer of technology according to the needs of local geography.
National Telecom Policy (1999)\textsuperscript{2} 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 teledensity is around 9.1\%. The growth of Indian telecom network has been over 30\% consistently during last 5 years.

According to Wellenius and Stern (2001)\textsuperscript{3} information is regarded today as a fundamental factor of production, alongside capital and labor. The information economy accounted for one-third to one-half of gross domestic product (GDP) and of employment in Organization for Economic Cooperation and Development (OECD) countries in the 1980s and is expected to reach 60 percent for the European Community in the year 2000. Information also accounts for a substantial proportion of GDP in the newly industrialized economies and the modern sectors of developing countries.

Videsh Sanchar Nigam Limited (VSNL) 16\textsuperscript{th} Annual Report (2002)\textsuperscript{4} 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)\textsuperscript{5} 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)**\(^6\) 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)**\(^7\) 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 teledensity, has improved rapidly from 43.6 in March 2001 to 4.9 in December 2002.

**Adam Braff, Passmore and Simpson (2003)**\(^8\) focus 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)**\(^9\) 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)\textsuperscript{10} 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)\textsuperscript{11} 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)\textsuperscript{12} 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 14\textsuperscript{th} in 1995, and second largest among the emerging economies. It is also the world’s 12\textsuperscript{th} 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.

ASEAN India Synergy Sectors (2005)\textsuperscript{13} point out that high quality of telecommunication infrastructure is the pillar of growth for information technology (IT) and IT enabled services. Keeping this in view, the focus of
telecom policy is vision of world class telecommunication services at reasonable rates. Provision of telecom services in rural areas would be another thrust area to attain the goal of accelerated economic development and social change. Convergence of services is a major new emerging area.

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%.

In 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 $ 2.5 bn 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)\textsuperscript{16} 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)\textsuperscript{17} 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)\textsuperscript{18} 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 Whitebook (2005)\textsuperscript{19} 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%.

According Economic Times (2005)\textsuperscript{20} Indian mobile phone market is set to surge ahead since urban India has a teledensity of 30 whereas rural India has a teledensity of 1.74. It indicates that the market is on ascent, with more than 85000 villages yet is come under teleconnectivity.

According to a paper released by the Associated Chambers of commerce and Industry of India (2005)\textsuperscript{21}, it is stated that 30% of the new mobile subscribers added by the operators worldwide will come from India by 2009. 10% of the third generation (3G) subscribers will be from India by 2011, Indian handset segment could be between US $ 13 billion and US $ 15 billion by 2016. It offers a great opportunity for equipment vendors to make India a manufacturing hub. Indian infrastructure capital expenditure on cellular equipment will be between 10 to 20% of the investment that will be made by international operators by 2015. The other proposals included setting up of hardware manufacturing cluster parks, conforming to global standards and fiscal incentives for telecom manufacturing among others.

Virat Bahri (2006)\textsuperscript{22} explains the viewpoint of Sam Pitroda the Chairman of Worldtel that identifies opportunities for investments in telecommunications. He analyses that there is an increasing role for telecom in e-governance in India. According to him, technology can be leveraged to take India’s
development to next level.

According to Snyder (2006) Communications is a process that allows information to pass between a sender and one or more receivers and the transfer of meaningful information or ideas from one location to a second location. Communications is a human process; humans communicate by sending information between themselves. Whereas, telecommunication is the transmission of data or information over a distance. Tele is a Greek word meaning at a distance, far off. Thus, it classifies smoke signals, semaphore flags, lanterns and signal flares, telegraph systems, televisions, telephones, written letters, and hand signals as capabilities that support telecommunications. The problems with these communications forms include reliability, speed of transmission, and comprehension purposes.

According to Rohit Prasad & V.Sridhar (2007) this is one of the first such attempt to analyse the tradeoffs between low market power and economics of scale for sustained growth of mobile services in the country. Our analysis of the data on mobile services in India indicates the existence of economies of scale in this sector. We also calculate the upper bound on the optimal number of operators in each license service area so that policies that make appropriate tradeoffs between competition and efficiency can be formulated.

Narinder K Chhiber (2008) the mobile telecommunication technology is evolving rapidly in the world as more people demand mobile services with longer bandwidth and new innovative services like connectivity anywhere, anytime for feature like T.V., Multimedia, Interoperability and seamless connectivity with all types of protocols and standards, while the 3G
services are yet to fully come up. Serious discussion on 4G has started.
WLAN hot spot have made inroads along with 3G to offer an alternative
form of mobile access.

2.1.2: STUDIES RELATED TO TECHNOLOGY UPGRADATION IN
TELECOM SECTOR

Uehara (1990); King (1990); Glynn (1992); Mutoh (1994)\textsuperscript{26} emphasized
that technological changes in the telecom and computers have radically
changed the business scenario. In turn, the new demands of business have
spurred many telecom based technological innovations. In order to exploit
these innovations for competing in global markets, business community has
been putting pressures on governments to revise the policy, regulation and
structure of the telecom sector. Several countries across the world have
responded by restructuring the state controlled telecom provider, increasing
private participation and deregulating service provisions.

Business Today (1992)\textsuperscript{27} pointed out that due to lack of technical and
financial resources especially foreign exchange, the DOT generally lagged
behind in its level of technology. India’s indigenization program in the
switching segment carried out by C-DOT was successful in the introduction
of rural exchanges designed especially for Indian conditions characterized
by dust, heat and humidity.

According to Economic Commission for Europe (2000)\textsuperscript{28} this transition of
the telecommunication area is mainly technology driven. The borderline
between computers and electronics, on the one hand, and
telecommunications, on the other, is disappearing. This convergence of
technologies has led to the acceleration of the innovation process, which is
constantly bringing forward new products and services. Besides expanding the market potential, this innovation process has also given rise to major changes in industry and the institutional structure.

E Pedersen and Methlie (2002) studied the technology aspect and explained a comparative view. According to them, a comparison of the slow adoption of WAP services in Europe with the successful adoption of comparable I-mode services in Japan and technologically simple SMS based services in Scandinavian suggest that aggregate and technology based models are insufficient to explain the mobile service. Thus, technological models of the supply side need to be supplemented with the views and impact of perceptions from the demand side of the mobile commerce end user.

World Telecommunication Development Report (2002) technologies of mobile telecommunications and internet are going to set the contours of further technological progress in the current decade. The most recently initiatives aims at convergence of voice and data received from multiple sources both web based and real time video streams in mobile handsets and calling cards have virtual presence possible almost everywhere overcoming the barriers of distance, topography and remoteness.

Prithipal Singh (2004) with the convergence of technologies, data services are expected to grow exponentially in the years to come. Broadband is likely to take a lead in the development of Indian Telecom Sector. Broadband is growing market and offers immense possibilities for investment. In Broadband policy, India has envisaged a target of 40 million Internet subscribers and 20 million broadband subscribers by 2010.
P.S. Saran (2004)\textsuperscript{32} the telecom technology in India has transformed from manual and electro-mechanical systems to the digital systems. India has stepped into new millennium by having 100\% electronic switching system. The technological changes have made way for new services and economics in the provision of telecom services.

According to Mather (2005)\textsuperscript{33} the challenge, of course, is that a competitor can show up in one of your established markets with new technology, better people, a better network of companies for support and a better management style and steal huge chunks of your business before you can respond. Staying at the forefront of all these issues will be the only way to stay successful.

2.1.3: STUDIES ON INVESTMENT POLICY OF TELECOM SECTOR

Moto (1990)\textsuperscript{34} researched the need of separate policy, regulation and operation which require changes in legislation - for example the restructuring the Japanese Nippon Telegraph and Telephone Public Corporation and Kokusai Denshin Dewwa was preceded by appropriate changes in legal framework.

Melody (1990)\textsuperscript{35} points out that the Indian Government had not addressed the basic requirement necessary for reform and there was no pre-planned sequence of structural changes which are basic determinants of reform. Therefore, the government, investors and subscribes could expect only marginal benefits from the reform process.

MTNL Report (1991)\textsuperscript{36} explains that international bodies had supplemented government resources and funded expansion and technology up gradation
programmes.

Akwule (1992)\textsuperscript{37} researched that in comparison Kenya, which had almost the same level of gross domestic investment as percentage of GDP from 1981-89 raided the telecom investment as a share of GDP from 3.28\% to 8.67 in 1978. The effect of under investment in these sectors was compounded by the diffusion of these scarce resources over a number of areas where no specific area in telecom was developed.

Jain and Chhokar (1993)\textsuperscript{38} points out the limitations of capital and manpower as key constraints. The Athreya’s Committee’s report may be viewed as an initiation of a process of examining organizational options. Management incentives which would allow these organizations to increase profitability and the structural mechanisms which would allow then to raise capital from markets had been sketchily outlined.

2.1.4: STUDIES RELATING TO COMPETITION IN INDIAN TELECOM SERVICE SECTOR

Melody (1990)\textsuperscript{39} points out various concerns for the telecom sector covering competition as important one. Competition is considered more important factor than ownership in introducing efficiency. Further the order in which structural adjustments take place determine the effectiveness.

Donaldson(1994), Jussawala (1992); Jain, (1995); Wellenius (1995),\textsuperscript{40} recognize that developing countries feel the important role a responsive, business oriented, and technologically advanced telecom sector plays in the growth of the economy. Many developing countries accept the limitations of a monolith state monopoly in responding to the twin challenges of spurring internal growth and competing in global economy.
According to Stephen Y. Walters (2003) the telecommunications industry is being rocked by change fueled by the advent of the tremendous success of the internet and its technologies. For quite some time, there has been competition in the telephony business. Long-distance rates have seen continuous decreases for two decades as new carriers sought to capture greater and greater market share. Local carriers have seen competition for interconnecting the networks of large corporate customers and for providing them access to long-distance services. So, competition and change are not new issues in telecommunications. But the internet has forced an entirely new set of changes on the phone business. There are new carriers, new business scenarios, new technologies, and new ways of thinking about end users and the services they seek.

Shyamal Ghosh (2003) mentions that the most significant development since 1999 has been the progressive reduction in tariffs which has been facilitated by competition through multi operator environment. The most dramatic reduction in tariff has been from very high Rs. 16 per minute to Rs. 2 per minute.

N.M. Shanthi(2005) throws light on the factors that contributed to the growth of telecom sectors. The studies various initiatives take by government in lien of liberalization, privatization and de-monopolization initiatives. The trend is expected to continue in the segment as prices are falling as a result of competition in the segments. The beneficiaries of the competition are the consumers who are given a wide variety of services.

Kushan Mitra (2005) analyses various factors contributing to competition to Indian Telecom Industry. Besides lowering of prices, increased efficiency,
greater innovation, highly tech industry better quality services are some of the reasons which are boosting competition amongst various telecom service providers.

**Michael Meltzer (2005)**\(^{45}\) explain that in electronic age, the need to manage customer relationships for profit is a marketing dilemma that many telecommunication companies face.

**Arindham Mukherjee (March, 2006)**\(^{46}\) takes out various case studies like Vodafone, Maxis, Telekopm Malaysia, Tatatele etc. to study the rising interest of foreigners for investment in Indian telecom industry. Various reasons of stemming growth can be rising subscriber base, rising teledensity, rising handset requirements, saturated telecom markets of other countries, stiff competition, requirement of huge capital, high growth curve on telecom, changing regulatory environment, conducive FDI limits in telecom sector.

**OECD (2007)**\(^{47}\) by increasing competition uptake can be mainly realized by then following incentives ; (1) bundling of services, such as offering telephone line plus broadband access to internet ADSL at significantly reduced price, introducing triple play services on the subscriber line and promoting digital T.V. as a revenue source for the fixed line operator. These would however depend on the distance of the subscriber line from the local exchange and the quality of the copper line. Reducing cost for the second line would also be effective. This would lead to reduce prices for the consumer and reduce churn. (2) Increasing competition between broadband service providers. (3) Reducing the monthly rates of increased speed internet access using ADSL. (4) increasing awareness of the benefits of ADSL to
the society.(5) increasing the local content on the internet so to attract more users in attempt to find killer application that would attract user to indispensable ADSL experience.(6) adopting convergence between wireless or mobile and fixed services.

2.1.5: STUDIES RELATED TO CRM IN SERVICES SECTOR

As Navin (1995)\(^\text{48}\) points out, these terms have been used to reflect a variety of themes and perspectives. Some of these themes offer a narrow functional marketing perspective while others offer a perspective that is broad and somewhat paradigmatic in approach and orientation. A narrow perspective of customer relationship management is database marketing emphasizing the promotional aspects of marketing linked to database efforts.

(Bickert, 1992)\(^\text{49}\) Another narrow, yet relevant, viewpoint is to consider CRM only as customer retention in which a variety of after marketing tactics is used for customer bonding or staying in touch after the sale is made.

(Vavra 1992).\(^\text{50}\) A more popular approach with recent application of information technology is to focus on individual or one-to-one relationship with customers that integrate database knowledge with a long-term customer retention and growth strategy

(Peppers and Rogers, 1993)\(^\text{51}\). Thus, Shani and Chalasani (1992) define relationship marketing as “an integrated effort to identify, maintain, and build up a network with individual consumers and to continuously strengthen the network for the mutual benefit of both sides, through interactive, individualized and value-added contacts over a long period of time”.

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Jackson (1985)\textsuperscript{52} applies the individual account concept in industrial markets to suggest CRM to mean, “Marketing oriented toward strong lasting relationships with individual accounts”.

McKenna (1991)\textsuperscript{53} professes a more strategic view by putting the customer first and shifting the role of marketing from manipulating the customer (telling and selling) to genuine customer involvement (communicating and sharing the knowledge).

Berry (1995)\textsuperscript{54}, in somewhat broader terms, also has a strategic viewpoint about CRM. He stresses that attracting new customers should be viewed only as an intermediate step in the marketing process. Developing closer relationship with these customers and turning them into loyal ones are equally important aspects of marketing. Thus, he proposed relationship marketing as “attracting, maintaining, and – in multi-service organizations – enhancing customer relationships”. Berry’s notion of customer relationship management – resembles that of other scholars studying services marketing, Gronroos (1990), Gummesson (1987), and Levitt (1981)\textsuperscript{55}. Although each of them is espousing the value of interactions in marketing and its consequent impact on customer relationships, Gronroos and Gummesson take a broader perspective and advocate that customer relationships ought to be the focus and dominant paradigm of marketing. For Gronroos (1990) states: “Marketing is to establish, maintain and enhance relationships with customers and other partners, at a profit, so that the objectives of the parties involved are met. This is achieved by a mutual exchange and fulfillment of promises”. The implication of Gronroos’ definition is that customer relationships is the ‘raison de être’ of the firm and marketing should be
devoted to building and enhancing such relationships.

Morgan and Hunt (1994)\textsuperscript{56}, draw upon the distinction made between transactional exchanges and relational exchanges by Dwyer, Schurr, and Oh (1987)\textsuperscript{57}, to suggest that relationship marketing “refers to all marketing activities directed toward establishing, developing, and maintaining successful relationships.”

The core theme of all CRM and relationship marketing perspectives is its focus on cooperative and collaborative relationship between the firm and its customers, and/or other marketing actors. Dwyer, Schurr, and Oh (1987)\textsuperscript{58} have characterized such cooperative relationships as being interdependent and long-term oriented rather than being concerned with short-term discrete transactions. The long-term orientation is often emphasized because it is believed that marketing actors will not engage in opportunistic behavior if they have a long-term orientation and that such relationships will be anchored on mutual gains and cooperation (Ganesan, 1994)\textsuperscript{59}.

Another important facet of CRM is “Customer selectivity”. As several research studies have shown not all customers are equally profitable for an individual company (Storbacka, 2000)\textsuperscript{60}. The company therefore must be selective in tailors its program and marketing efforts by segmenting and selecting appropriate customers for individual marketing programs. In some cases, it could even lead to “outsourcing of some customers” so that a company better utilize its resources on those customers it can serve better and create mutual value. However, the objective of a company is not to really prune its customer base but to identify appropriate programs and
methods that would be profitable and create value for the firm and the customer.

As observed by Sheth and Parvatiyar (1995), developing customer relationships has historical antecedents going back into the pre-industrial era. Much of it was due to direct interaction between producers of agricultural products and their consumers. Similarly artisans often developed customized products for each customer. Such direct interaction led to relational bonding between the producer and the consumer. It was only after industrial era’s mass production society and the advent of middlemen that there were less frequent interactions between producers and consumers leading to transactions oriented marketing. The production and consumption functions got separated leading to marketing functions being performed by the middlemen. And middlemen are in general oriented towards economic aspects of buying since the largest cost is often the cost of goods sold.

Berry and Parsuraman (1991); Bitner (1995); Crosby and Stephens (1987); Crosby, et al. (1990); Gronroos (1995) the de-intermediation process and consequent prevalence of CRM is also due to the growth of the service economy. Since services are typically produced and delivered at the same institutions, it minimizes the role of the middlemen. A greater emotional bond between the service provider and the service users also develops the need for maintaining and enhancing the relationship. It is therefore not difficult to see that CRM is important for scholars and practitioners of services marketing.

According to Frazier, Speakman and O’Neal (1988) another force driving the adoption of CRM has been the total quality movement. When
companies embraced Total Quality Management (TQM) philosophy to improve quality and reduce costs, it became necessary to involve suppliers and customers in implementing the program at all levels of the value chain. This needed close working relationships with customers, suppliers, and other members of the marketing infrastructure. Thus, several companies formed partnering relationships with suppliers and customers to practice TQM. Other programs such as Just-in-time (JIT) supply and Material Resource Planning (MRP) also made the use of interdependent relationships between suppliers and customers.

According to (Shapiro and Posner, 1979) with the advent of the digital technology and complex products, systems selling approach became common. This approach emphasized the integration of parts, supplies, and the sale of services along with the individual capital equipment. Customers liked the idea of systems integration and sellers were able to sell augmented products and services to goods, as well as services. At the same time some companies started to insist upon new purchasing approaches such as national contracts and master purchasing agreements, forcing major vendors to develop key account management programs. Similarly, in the current era of hyper-competition, marketers are forced to be more concerned with customer retention and loyalty (Dick and Basu, 1994; Reicheld, 1996). As several studies have indicated, retaining customers is less expensive and perhaps a more sustainable competitive advantage than acquiring new ones. Marketers are realizing that it costs less to retain customers than to compete for new ones (Rosenberg and Czepiel, 1984). On the supply side it pays more to develop closer relationships with a few suppliers than to develop more vendors (Hayes et al., 1998; Spekman, 1988).
In addition, several marketers are also concerned with keeping customers for life, rather than making a one-time sale (Cannie and Caplin, 1991)\(^{68}\). There is greater opportunity for cross-selling and up-selling to a customer who is loyal and committed to the firm and its offerings. Also, customer expectations have rapidly changed over the last two decades. Fueled by new technology and growing availability of advanced product features and services, customer expectations are changing almost on a daily basis. Consumers are less willing to make compromises or trade-off in product and service quality. In the world of ever changing customer expectations, cooperative and collaborative relationship with customers seem to be the most prudent way to keep track of their changing expectations and appropriately influencing it (Sheth and Sisodia, 1995)\(^{69}\).

According to Yip and Madsen (1996)\(^{70}\) today, many large internationally oriented companies are trying to become global by integrating their worldwide operations. To achieve this they are seeking cooperative and collaborative solutions for global operations from their vendors instead of merely engaging in transactional activities with them. Such customers needs make it imperative for marketers interested in the business of companies who are global to adopt CRM programs, particularly global account management programs). Global Account Management (GAM) is conceptually similar to national account management programs except that they have to be global in scope and thus they are more complex. Managing customer relationships around the world calls for external and internal partnering activities, including partnering across a firm’s worldwide organization.
According to David L. Kurtz (2003) the purpose of relationship marketing is to build long-term connections between the company and its customers and to develop brand and firm loyalty. Relationship marketing works well for services where transactions tend to be continuous and switching costs for customers are high. Firms operating in the customization and functional service quality sector do well with relationship marketing programs. The long-term goal of relationship marketing is to build brand loyalty. Personal interaction with service personnel is critical in the development of the long-term relationship.

Marketing strategy formulation, incorporating ideas from economics, sociology, psychology, consumer behavior, organization behavior, business strategy, and information systems and decisions sciences.
2.2: STUDY RELATED TO MARKETING STRATEGY
2.2.1: STUDY RELATED TO MARKETING STRATEGY

Strategy is the fundamental pattern of present and planned objectives, resources, developments and interactions of an organization with markets, competitors and other environmental factors. (Mullins, Walker, Beyd & Larreche, 2002)\textsuperscript{72} for this reason, a good strategy should always specify;

1. What is to be accomplished
2. Where – the product, market, or industries that are to be focused.
3. How – resources and activities that will be allocated to each market/product to gain sustainable competitive advantage.

Marketing is a process for analyzing, planning and managing the organization’s resources while identifying and serving current and potential client group and their needs profitability.

Reason for developing marketing strategy Dirks & Danniel\textsuperscript{73} mention that company managers choose to introduced and/or reemphasize marketing strategy for a number of reasons, which may range from personal interests to corporate policies. However the reason usually centers around an opportunities or an identified problem that the company management needs to explore. For example:

1. Introducing new products or services
2. Expanding into new markets.
3. Differentiating products or services.
4. Revitalizing products, services or markets.
5. Deleting or ‘demarketing’ product or service
6. Responding to a drop in sales or profits.
7. Evaluating financial or legal risks of opportunities.
8. Enhancing company image, brand or reputation.

According to Armstrong\textsuperscript{74}, Kotler, Cunningham & Mitchell (2004) strategic marketing planning are documents that outline in detail the marketing strategies which will help a company, product or brand accomplish its overall business objectives.

The article published by Vargo and Lusch (2004)\textsuperscript{75} in the journal of marketing comes up with a proactive “new dominant logic” for the field of marketing. It questions the differences between the marketing of goods and services. Some of the main arguments made by these authors are the following:

1. Material goods are only distribution mechanisms for service distribution.
2. Knowledge is the fundamental source of competitive advantage.
3. All economies are service economies.
4. The customer is always a co-producer.

According to Nagasimha Kanagal (2006)\textsuperscript{76}, relationships as a focus on marketing aids in the understanding of consumer needs and wants, which is useful to implement profitable exchanges. Relationship marketing helps customising solutions to important customers, more efficiently than otherwise, knowledge and application of relationship marketing helps in achieving customer satisfaction, customer retention and customer acquisition. Relationship marketing a tool of furthering the customer
understanding and interactive processes. Relationship marketing outputs can thus be usefully used, as inputs in product design and development, want identification, improving selling systems, pricing strategies. It is one of the supports to systematic action setting in competitive marketing strategy.

Author such as stanton, etzel & walker (1991;13)⁷⁷, McCartly & Perrearelt (1993;46) and Kotler & armstrong (1997;52) agree that the traditional marketing mix has been defined as a set of controllable instruments to manage the uncontrollable and dynamic marketing environment and consist of four major element price, product, promotion or marketing communication and place.

According to Donath (1999;14)⁷⁸ there is an overemphasis on price and product as marketing instruments and an underemphasis on place and promotion. A danger exists that organizations will there for make a misallocation of organizational resources between the four marketing mix instruments (Chintaganta & vikassinh, 1994;87)⁷⁹.
2.2.2: STUDY RELATED TO CONSUMER BEHAVIOUR

Consumer decision making process is usually guided by already formed preferences for a particular alternative. This means that consumers are likely to make the choice between alternatives based on limited information search activity and without detailed evaluation of the other alternatives (alba and Hutchinson, 2000; Chernev, 2003).\(^{80}\)

The researcher found that many decision strategies used by consumers can change due to person, context and task specific factor (Dhar, Nowlis and Sherman, 2000).\(^{81}\)

It is widely accepted that the traditional problem solving approach involving, rational decision making to the study of consumer choice may not be suitable for all situations, or is at least incomplete understand choice behavior. Limited information search and evaluation of alternatives led to a situation in which consumer choice is also driven by hedonic considerations (Dhar and Wertenbroch, 2000)\(^{82}\).
2.3: STUDY RELATED TO SURVEY PROJECTS ON TELECOM SERVICES
2.3.1: STUDY RELATED TO SURVEY PROJECTS ON TELECOM SERVICES

Kalavani (2006)\textsuperscript{83} in their study analyzed that majority of the respondents have given favorable opinion towards the services but some problems exist that deserve the attention of the service providers. They need to bridge the gap between the services promised and services offered. 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.

Seth et al (2008)\textsuperscript{84}, in their study titled “Managing the Customer Perceived Service Quality for Cellular Mobile Telephone: an Empirical Investigation” analyzed that there is relative importance of service quality attributes and showed that responsiveness is the most importance dimension followed by reliability, customer perceived network quality, assurance, convenience, empathy and tangibles. This would enable the service providers to focus their resources in the areas of importance. The research resulted in the development of a reliable and valid instrument for assessing customer perceived service quality for cellular mobile services.

Kalpana and Chinnadurai (2006)\textsuperscript{85} in their study titled “Promotional Strategies of Cellular Services: A Customer Perspective” analyzed that the increasing competition and changing taste and preferences of the customer’s all over the world are forcing companies to change their targeting strategies. The study revealed the customer attitude and their satisfaction towards the cellular services in Coimbatore city.

Rick (2008)\textsuperscript{86}: in his study found that companies with sound customer strategies can use that ultimate loyalty program as a differentiator in an
increasingly muddled market. In an increasingly competitive market, customer loyalty efforts can play a major part in the attraction of new customers and the retention of current ones. As consumers' choices expand, the importance of a sound customer relationship strategy becomes more and more important for the success of the company.

Shikha Ojha (2009)\textsuperscript{87} conducted a study on “Consumer Awareness of VAS of Telecom Sector of India”. She analyzed the contribution of the mobile phone services not only at the national or state level, but also its involvement in an individual's life. She found out that the less number of users are aware of all the VAS provided by the service providers and thus the companies should focus on the awareness campaign.

Shirshendu Ganguli (2008)\textsuperscript{88} conducted a study on “Drivers of Customer Satisfaction in Indian Cellular services Market “in which he discussed the impact of service quality and features on customer satisfaction from the cellular users viewpoint.

J D Power(2009)\textsuperscript{89} conducted a study on “Customers increasingly want telecom services and products to be bundled” based on responses collected from 11,911 customers nationwide and examined the overall customer satisfaction on six factors – customer service, reliability, billing, image, cost of service, offers & promotions.

Girish Taneja & Neeraj Kaushik (2007)\textsuperscript{90} conducted a study on “Customers perception towards Mobile service providers: An analytical study” aims to deduce the factors that customers perceive to be the most important while utilizing the services of a mobile service provider.
Anita Seth (2007) in his study on “Quality of service parameters in cellular mobile communication” developed a model of service quality and a set of dimensions for comparative evaluation which could provide useful directions to regulators and service providers.

Swadeshkumar Samanta (2007) did a study on impact of price on mobile subscription and revenue access price or fixed monthly fee for mobile services is the major factor that governs the percentage of people subscribing (penetration) to the services. Empirical analysis shows a strong correlation between access price and penetration for developing and developed countries. They demonstrate a tradeoff between price of access and per minute call and show how subscription and revenue to the operator can be increased.

Wilska (2003) according to survey of finish young people aged 16-20, it was found that mobile phones choice and especially usage is consistent with respondents’ general consumption styles. The researcher showed that addictive use was common among females and was related to trendy and impulsive consumption styles. Instead, males were found to have more technology enthusiasm and trend – consciousness. These attributes were then linked to impulsive consumption. the study concluded that genders are becoming more alike in telecom service choice. Because individual differences in consumption patterns are obviously identifiable.

Requelme(2001) examined how much self knowledge consumers have when choosing between different telecom service brands. The study was built upon six key attributes (service features, connection fee, access cost, cell to cell phone rates, call rates and free calls) related to mobile. The
research showed that consumers with prior experience about a product can predict their choices relatively well, although respondents tended to overestimate the importance of features, call rates and free calls and underestimate the importance of a monthly access fee, mobile to mobile phones rates and the connection fee. Mobile phone choice and use has also been found to be related to prior consumption style.
2.4: STUDY RELATED TO MARKETING STRATEGY IN TELECOM SECTOR
Leonard L. Berry and A. Parasuraman (1991) showed that inspired leadership, a customer-minded corporate culture, excellent service-system design and efficient use of information and technology are crucial for achieving superior service quality and service marketing. They argued that superior quality is vital to sustaining success. They insisted that customer satisfaction through integration of service quality throughout the system must be the focus of any company.

Ruth M. Bolton and James H. Drew (1991), developed a model of how customers with prior experiences and expectations assess service performance levels, overall service quality, and service value. The model was applied to residential customers' assessments of local telephone service. The model was estimated with a two-stage least squares procedure through survey data. Results indicated that residential customers' assessments of quality and value are primarily a function of disconfirmation arising from discrepancies between anticipated and perceived performance levels. However, perceived performance levels also were found to have an important direct effect on quality and value assessments.

Kenneth Teas (1993) examined conceptual and operational issues associated with the "perceptions minus-expectations" (P-E) perceived service quality model. The examination indicated that the P-E framework was of questionable validity because of a number of conceptual and definitional problems involving the (1) conceptual definition of expectations, (2) theoretical justification of the expectations component of the P-E framework, and (3) measurement validity of the expectation (E) and revised expectation (E*) measures specified in the published service quality literature. Consequently, alternative perceived quality models that address
the problems of the traditional framework were developed and empirically tested.

**Pratibha A. Dabholkar (1993)** iterated that customer satisfaction and service quality are both important tools for creating competitive advantage. However, there is a lack of consensus on whether the two are separate constructs and how they should be measured. The research presented a number of conceptualizations of customer satisfaction and service quality based on disconfirmation, a transactional versus global view and the inclusion of cognitive and/or affective factors. Possible antecedents and consequences of both constructs were examined, and suggestions for future conceptualization and measurement of the constructs were provided.

Eugene W. Anderson (1996) investigated the association between customer satisfaction and willingness-to-pay or price tolerance. The goal was not only to determine whether the association between customer satisfaction and price tolerance is positive or negative but also to gauge the degree of association. The empirical analysis indicated a negative association between the level of customer satisfaction provided by the firm and the degree of price tolerance exhibited by its customers. However, a positive association was found between year-to-year changes in the levels of customer satisfaction and price tolerance.

**Stephen S. Tax et al. (1998)** said that many companies are considering investments in complaint handling as means of increasing customer commitment and building customer loyalty. Firms are not well informed, however, on how to deal successfully with service failures or the impact of complaint handling strategies. The results of the paper supported a quasi “brand equity” perspective—whereas satisfaction with complaint handling had a direct impact on trust and commitment, to a limited extent, on the effects
of poor complaint handling. Implications for managers and scholars were also discussed.

**Bepko (2000)** says that among the areas which need to be addressed in service quality research is the nature of consumer expectations across the range of intangibility. Previous research had compared consumers’ service quality expectations across services, but different groups of subjects were evaluated for each different service. The problem with using different subjects for each service is that the subject’s demographic characteristics may be responsible for the significant differences in expectations of quality. The paper used a controlled, repeated measures design where subjects were each asked to evaluate three services, varying in their degree of intangibility, over a ten week period.

**David M. Szymanski and David H. Henard (2001)** said that the growing number of academic studies on customer satisfaction and the mixed findings they report complicate efforts among managers and academics to identify the antecedents to, and outcomes of, businesses having more versus less-satisfied customers. These mixed findings and the growing emphasis by managers on having satisfied customers point to the value of empirically synthesizing the evidence on customer satisfaction to assess current knowledge. To this end, the authors conducted a meta-analysis of the reported findings on customer satisfaction. They documented that equity and disconfirmation are most strongly related to customer satisfaction on average. They also found that measurement and method factors that characterize the research often moderated relationship strength between satisfaction and its antecedents and outcomes. The authors discussed the implications surrounding these effects and offered several directions for future research.
Carsten Fink et al. (2001)\textsuperscript{102} examined the liberalization of the basic telecommunications sector in Asian countries in their research paper for World Bank, with a view to identify the elements of good policy and examine how it can be promoted through multilateral negotiations. They found that despite the move away from traditional public monopolies, most Asian governments are still unwilling to allow unrestricted entry, eliminate limits on private and foreign ownership, and establish strong independent regulators. Where comprehensive reform – including privatization, competition and regulation – has been implemented, there are significantly higher levels of main line availability, service quality and labor productivity. Maran et al. (2004)\textsuperscript{103} studied the consumer perceptions about fixed telephone lines in Chennai. The objectives of the study was (1) to find the most influencing factor in selection of service provider, and (2) to measure customer perception and satisfaction as regards the service provided. The study on a sample of 550 telephone users indicated that some problems exist that deserve the attention of the company. The company needs to bridge the gap between the services promised and services offered. And to conclude, “Delivering service without measuring the impact on the customer is like driving a car without a windshield”.

Shanthi (2005)\textsuperscript{104} throws light on the telecommunications market of India – post privatization. In the scenario of falling prices, hyper-competition and increasing attrition rates and the author says that the study aims to bridge the research gaps identified as above.
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