Chapter - 3 Literature Review

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3.1 Indian Telecom Sector Study

Telecommunications has been recognized the world-over as an important tool for socio-economic development for a nation. It is one of the prime support services needed for rapid growth and modernization of various sectors of the economy. It has become especially important in recent years because of enormous growth of information technology and its significant potential for the impact on the rest of the economy. The Telecom Sector, which has the multiplier effect on the economy, has a vital role to play in economy by way of contributing to the increased efficiency. The available studies suggest that income of business entities and households increases by the use of telecom services.

National Telecom Policy (1999) the introduction of the New Telecom Policy in 1999, Indian telecom industry has witnessed exponential growth, especially in the wireless segment. The industry has evolved as a basic infrastructure on the similar lines of electricity, roads, water etc.

The overall tele-density has increased from 4.3 in March 2002 to 78.1 in February 2012, wherein the rural areas registered an increase from 1.2 in March 2002 to 38.5 in February 2012, according to a report titled ‘Telecom Sector in India: A Decadal Profile’ prepared by the Telecom Regulatory Authority of India (TRAI). Also, the share of telecommunication services (excluding postal and miscellaneous services), as a per cent of the total gross domestic product (GDP), has increased from 0.96 in 2000-01 to 3.78 in 2009 -10. The Government has given estimates that every 10 per cent increase in access of broadband connectivity boosts the GDP by 1.38 per cent. International comparisons (among 222 countries) in the same report show that India has the second largest number of telephone subscribers in the world accounting for 12 per cent of the world’s total telephone subscribers.

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 no. 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 sector 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.

Adam Braff, Passmore and Simpson (2003) state 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 may account for as much as 80% of new customers in 2005.

Dutt and Sundaram (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) analyzed 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 3rd 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.

ASEAN India Synergy Sectors (2005) 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.

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) 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.

Marketing Whitebook (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%.

According Economic Times (2005) 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 to come under tele-connectivity.
According to a paper released by the Associated Chambers of Commerce and Industry of India (2005), it is stated that 30% of the new mobile subscribers added by the operators worldwide will come from India by 2009. The 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) 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.

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.

Uehara (1990); King (1990); Glynn (1992); Mutoh (1994) 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) 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 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) 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) 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.

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

Melody (1990) 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) explains that international bodies had supplemented government resources and funded expansion and technology upgradation programmes.

Jain and Chhokar (1993) points out the limitations of capital and manpower as key constraints. The Athreya Committee 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.

Melody (1994) points out various concerns for the telecom sector covering competition as important one. Competition is considered more important factor than ownership in introducing efficiency.

Donaldson(1994), Jussawala (1992); Jain, (1995); Wellenius (1995) 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.

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. There are various initiatives taken 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, high tech industry and better quality services are some of the reasons which are boosting competition amongst various telecom service providers.

Arindham Mukherjee (March, 2006) 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.

Bickert (1992) 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) 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.

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

McKenna (1991) 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) 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”.

Gronroos (1990), Gummesson (1987) and Levitt (1981) 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 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) 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).

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). 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.

The telecom subscriber base stood at 944.81 million in July 2012, according to data released by TRAI.

Another report by CAG has revealed that telecom users in rural India have increased at a faster pace as against urban users. Moreover, the capital investment in the sector increased from Rs 240711 crore (US$ 43.63 billion) in 2006-07 to Rs 479278 crore (US$ 86.88 billion) in 2010-11, while the capital employed grew to Rs 337683 crore (US$ 61.2 billion) from Rs 198011 crore (US$ 36 billion) in the same period, indicating a tremendous growth in investment in the telecom sector.

Furthermore, mobile data traffic in India has increased by 54 per cent between December 2011 and June 2012, according to a report by Nokia Siemens Networks. The statistics reveal that data traffic generated by 3G services has increased by 78 per cent while that of 2G services has increased by 47 per cent during the period. While 2G users in India are consuming three-fourth of the total mobile data traffic on average, 3G users consume four times more data than 2G users. Considering such a tremendous growth, Nokia Siemens Networks expects the country’s mobile data consumption to double by June 2013.

Owing to ‘banking-on-the-go’ initiatives taken by banks such as SBI and ICICI, the value of mobile banking transactions increased five-fold to Rs 1140.6 crore (US$
206.75 million) between January and May 2012 as against the same period a year ago. Service providers like Airtel have promoted mobiles as medium for bill payments and fund transfers in a big way, due to which the volume of transactions also rose significantly (from 0.5 crore in January-May 2011 to 1.5 crore mobile transactions in January-May 2012).

In terms of subscriber base, Bharti Airtel made the lead in the month of July 2012 with 188.8 million subscribers followed by Vodafone with 154.9 million. Idea Cellular added 4,55,912 subscribers to have 117.6 users and State-run Bharat Sanchar Nigam Ltd (BSNL) added 4,71,552 users to have 98.75 million subscribers. Tata Teleservices has a total number of 77.8 million subscribers, while Uninor has 44.5 million.

With regards to the handsets market, mobile phone sales increased 9.1 per cent (crossing the 50-million-mark) in January-March 2012 quarter as against the same quarter in 2011, according to the latest data released by Cybermedia Research India. Smartphones accounted for 5.3 per cent of the handsets sold and about a quarter of the handset revenues in the country. Multi-SIM handsets captured two-thirds of the total sales, while 3G handsets accounted for less than 10 per cent of it.

Finnish handset maker Nokia maintained its leadership position with 23 per cent of the handset market share, followed by Samsung with 14.1 per cent and Indian brand Micromax at third position with 5.8 per cent of the pie, in terms of sales (unit shipments) during the January-March 2012 quarter.

China-based telecom equipment maker Huawei has planned to invest US$ 150 million in its research and development (R&D) centre in Bengaluru. The new facility will acknowledge Huawei’s enterprise, telecom operators and cellphone business segments.

Thiruvananthapuram-based provider of real-time closed-loop mobile marketing solutions Flytxt, has bagged two deals with African telecom companies Warid Uganda and Warid Congo B wherein the firm will provide its campaign management solution to the latter. The technology collects and integrates subscriber insights based
on service consumption trends and helps cellular service providers to customize
service offerings.

The Government of India is focusing on improving rural tele-density and broadband
connectivity, effective expansion of the networks with efficient utilization of scarce
spectrum and ensuring equal sharing of highly capital intensive infrastructure.

TRAI, the telecom sector regulator, intends to create standards to ensure quality of
service for mobile phone companies which deliver mobile data services to the users.
Considering the fact that roll out of 3G and 4G high-speed data access services across
the country will lead to quantum jump in the number of mobile internet users, the
authority is seeking comments from stakeholders in the sector. According to the draft
regulations issued, TRAI has created nine parameters benchmarks including service
activation clause (that the service would be activated within three hours with a 95 per
cent success rate), drop rate (or the network's inability to upload or download, should
be below 2 per cent) etc.

Telecom service providers would be required to collect and maintain compliance
records of each of the nine parameters and submit them to TRAI within 60 days of
notification of these new rules.

Time-Division long-Term evolution (TD-LTE) market in India is at a nascent stage
and expected to pick up in the next couple of years. Analysts predict that TD-LTE
subscribers in India would reach 5 million in 2013, with the focus on mobile
broadband. Further, smartphone launches by companies such as Nokia, Samsung and
Apple will spur significant surge in data consumption.

TD-LTE, also called as Long-Term Evolution Time-Division Duplex (LTE TDD), is
a 4G mobile telecommunication technology which was developed in China.
3.2 Brands and image

The values which make up a brand exist because they are perceived. They are also evaluated positively or negatively by customers and potential customers. These evaluations come together to form the brand's image.

The first thing to accept about image is that it is a perception and need not necessarily be fact. Buyers cannot know in a factual sense all there is to know about a company. What they do not know they may assume or expect without any objective evidence; in simple terms they will hold an opinion. But these perceptions are to the buyer, just as real as those based on harder evidence and almost certainly will influence the purchasing decision.

Companies have touch points with their market which create these perceptions. For example there is the company representative. Let's assume that he or she is smart and drives a new car and always makes a good impression. He calls on companies who, without any further knowledge, think well of the supplier because he projects a positive image and this is extended to his company. The company benefits from the halo of the representative. All other points of contact with the customer will produce a reaction of some sort or another in the buyer. Some of the other touch points will also influence the relationship. The speed, courtesy and friendliness of the switchboard will have an impact. The appearance of the e-mails or the letterhead, literature and promotions will influence the image. Once the relationship between a supplier and customer gets deeper, then many other opportunities will arise in which the image can be affected, including the chance to demonstrate the company's performance on substantial issues such as the product quality, reliability of deliveries, after sales service and so on.

A positive image is one which will continue to work for a company, even when things start to go wrong. A company with an excellent reputation can suffer an occasional slippage in one area or another and the customer will be forgiving. In contrast, a company with a poor image will be castigated for any default and there will be no exoneration. The strength of the Perrier brand pulled it through after a disastrous
contamination of the product by benzene required the complete recall of all its stock of bottles in warehouses, shops and homes. Mercedes were more defensive when it’s new A class failed the "moose test", blaming the driving skills of the Swedish journalists rather than the design of the car's suspension. Cadbury were slow to admit to and recall products that were infected with salmonella and this undoubtedly cost them heavily in lost sales.

Image is something which can be taken in the round. This overall image is the pooling of the all the perceptions and feelings which people hold on a company. When we enter the ballot box to place our cross against a politician, it is the overall package we vote for. There will be some things about the politician we dislike but these seem to be outweighed by the virtues. The juggling of the pros and cons are distilled into just one decision - one box, one cross.

So it is with brands; perceptions - image - are translated into a purchase decision. A company will be chosen as a supplier if it is at least acceptable on all the essentials (price, delivery, quality) and seen positively for most of the nice to have (innovative, good warranty, easy to do business with). It can even have a negative image in some areas as long as they are not ones critical to the decision. Companies with excellent products which are reasonably priced may get away with long delivery dates. They may even make a feature of their waiting lists by suggesting that they are an indicator of their popularity.

Buyers act on perceptions as if they were facts. What else have they got to go on? They cannot be all knowledgeable. They cannot know every nook and cranny of the products they are buying. They cannot be qualified, nor expected to know all about the guts of a machine they are considering buying. The guts of a machine may make it reliable but it is the appearance of the outer casing, the ergonomics of the design and the favorable (or otherwise) comments from service engineers which guide buying judgments. The composition of a cleaning fluid may be a mystery to a buyer but it is bought because it smells powerful, it looks thick and powerful, and on the pack it says that it is used for cleaning components in the aerospace industry where specifications are known to be amongst the highest.
Images are therefore based on less than complete knowledge but still shape action in relation to a supplier even if in only a negative way. A company may not be used as a supplier because of a negative (and in an objective sense, erroneous) image. It is often not understood that potential customers who have never had any dealings with a supplier may hold a strong image of that company. Far from being determined by purchasing experience, image may decide whether a supplier is used at all.

The achievement of a positive image, on core values - the really important issues - and any other values which differentiate it should be of the highest priority to any company. However, a very dangerous ploy is to try to alter a company's image without materially improving the underlying defects. In the 70s and 80s Alfa Romeo cars offered heart throbbing design and sparkling performance tinged with a variable reputation for reliability. Twenty years later, when the problems have long been solved, many motorists consider reliability to be a weakness of Alfa cars.

3.2.1 Benefits of Strong Brand Image

High levels of brand awareness and a positive image increase the probability of a product being chosen and decrease the vulnerability to competitive forces. Here are nine specific benefits which a company will obtain from a strong brand image.

- Premium prices can be obtained. A brand with a positive image will command larger margins and be less susceptible to competitive forces. There will be less pressure to sell at low prices or offer discounts.

- The product will be demanded. A brand which people think is good will be asked for specifically. People will search out a brand they really want.

- Competitive brands will be rejected. A strong brand will act as a barrier to people switching to competitors products. A brand is a defense which is permanently erected.
- Communications will be more readily accepted. Positive feelings about a product will result in people being able to accept new claims on its performance and they will warm them up so that they can be more easily persuaded to buy more.

- The brand can be built on. A brand which is well known and well regarded becomes a platform for adding new products as some aspects of the positive imagery will cross over and help in the launch of new products.

- Customer satisfaction will be improved. A positive image will give customers enhanced satisfaction when they use the product. They will feel more confident about buying it.

- The product will be pulled through the distribution network. A brand which people ask for can more easily be sold into wholesalers and distributors who are extremely responsive to what their customers want.

- Licensing opportunities can be opened up. A strong brand may support joint venture deals or allow the brand to be licensed for use in new applications or in other countries.

- The company will be worth more when it is sold. A company with a good brand name will obtain a higher premium for the goodwill, if and when it is sold.

Not only are there considerable benefits for industrial companies in building strong brands, there are serious penalties for those who do not. The alternative is to rely on price cutting, discounts and cost-reduction programmes. Customers will find no reason to buy other than on strongly functional factors which, no doubt, they can find to profusion in any number of suppliers.
3.2.2 Benefits to the Customer

We should not close this chapter with the impression that the gains from strong branding are all on the part of the supplier and at the expense of the customer. The customer too obtains benefits. There are three important reasons why customers benefit from products and services with strong brands:

- A strong brand is a summary of all the values associated with it. Making industrial buying decisions is complicated by the need to weigh up all the details of a product's performance, its price, the delivery, the guarantee etc. A brand with a strong image is a synthesis to the buyer of everything that a supplier stands for and offers.

- A strong brand makes customers feel confident in their choice. People shop at Marks & Spencer often without comparing products from elsewhere because they trust the brand. Strong industrial branding gives customers the same comforts.

- A strong brand makes customers feel more satisfied with their purchase. The quality perceptions translate to a feel good factor which makes customers happier than if the product had come from an unknown supplier.

3.2.3 Factors Influencing Brand Image

One of the fundamental tenets of marketing is that brand images are an important determinant of buying behavior (Aaker, 1991; Fischer et al., 2004). The construct of brand image can be understood as the associations external target groups have in their minds about brands. These associations can be further divided into those concerning the functional attributes of a brand and those concerning the symbolic attributes of a brand (Burmann and Meffert, 2005). Due to the importance of brand images for the behavior of various target groups, considerable attention has been paid to factors that possibly influence brand images. These influencing factors can be divided into three
groups: (1) determinants that originate directly from the internal brand identity and can thus be directly influenced by brand management (Burmann, and Meffert, 2005), (2) personal/individual determinants, for example, the motives and experiences of those who perceive the brand (Fopp, 1975; Williams and Mofitt, 1997), and (3) external factors, that is determinants that affect the brand image from outside and which cannot be directly influenced by brand management, for example industry image (Blinda, 2003; Dowling, 1993, 2001).

Buyers respond to branding by purchasing the same products or brands or by showing preference toward a particular brand, bringing firms higher market share, higher profits, or share value. Keller (1993), Aaker (1996), Helman, de Chernatony, Drury, and Segal-Horn (1999), and de Chernatony, Drury, and Segal-Horn (2003) have been focusing on how to build, create, popularize, and manage strong brands. Academic researchers observed that manufacturers can establish a strong brand image and rule the dealers’ perception by offering a number of extra benefits. It has been claimed that manufacturer support programs are related positively, so when a manufacturer provides many support programs, dealers may have some incentive to join and remain in the channel system. Boundary personnel (salespeople) had a significant positive effect on relative dealer satisfaction with the relationship. This link is a key factor in effective communication (Gassenheimer, 1996).

According to Kahn et al. (2004), communication and cooperation will promote sales distribution effectiveness. Marketers must carefully consider characteristics of middleman's marketing behavior in order to avoid the risk of linking incapable distributors (Luk, 1998). Managers at all level in the channel have a wealth of information. This diffusion of information technology into channels is having a profound effect on how managers look at the problem of managing channels and the resultant channel relations (Mentzer, 1993).

If we move toward further studies to advance our understanding on this phenomenon and to identify the gaps between mobile operator and dealer relationship, a long term profitable belief system in the channel can be established by assessing dealers' need and align objectives, by motivating them to attain the agreed-upon goals and provide appropriate support.
3.3 Brand Image and Company Performance

Research on brand equity and brand image management (e.g. Aaker and Keller, 1990; Keller, 1993; Park, Jaworski, and MacInnis, 1986; Park, Milber, and Lawson, 1991; Roth, 1992, 1995) suggests that marketers should develop brand image strategies before focusing on tactical marketing mix issues. In general, when the name of a brand is mentioned, the first idea that comes to the consumer's mind is the corporate image associated with it. Thus, a brand image not only implies an actual brand meaning, which is set up in the beginning, and managed over time, but also is reflected by a consumer's perception of the producing company reputation. Therefore, the image of a brand is mainly determined by corporate reputation, which means that corporate reputation can influence the performance of a branded product. Therefore, this study will investigate instances where brand image strategy and performance are moderated by corporate reputation.

At the same time, many researchers have investigated on strategic-performance relationship. The literature on strategic-performance dates back to the beginning of the 1970s. For many years, marketing and advertising managers and researchers have wrestled with the issue of brand image strategy applications. However, significant differences between consumers, corporate cultures, and market structures, probably justify some additional problems over brand image strategy (Park, Jaworski, and Maclnnis, 1986; Roth, 1995).

As stated above, brand image in consumer's mind reflects a series association of the corporation it belongs to. Thus it is important to discover brand image concepts in this study. Brand image has been acknowledged as an important area of research. This is because companies can increase their market share and growth rates by establishing a strong brand image in the minds of their customers (Roth, 1995). In this way, a good brand image can increase brand loyalty. Brand image is defined as perceptions about a brand as reflected by the brand's associations held in the consumer's memory (Herzog, 1963; Newman, 1957); it is constituted by a series of pictures and ideas in people's minds that sum up their knowledge of a brand (Levy, 1978), that, taken together, imply certain expectations of the customers (Gensch, 1978). However, Park,
Jaworski, and Maclnnis (1986) propose brand image as a strategic device for helping the brand concept to be implemented by means of an exercise in brand management.

In most previous studies, performance has usually been seen as a direct and objective phenomenon (Matsuno and Mentzer, 2000; Smith and Wright, 2004; Roberts and Dowling, 2002) that can be assessed by simply measuring the outcome of a company's revenue and sales volume. It can be divided into two parts: financial and non-financial. Financial performance is usually used as a general measure of a firm's overall financial health over a given period of time, and can be used to compare similar firms across the same industry or in order to compare industries or sectors in aggregation. Non-financial performances are those such as 'value', 'success', and 'significance' (Amir and Lev, 1996). As stated by Roth (1995), the success of brand image strategies is contingent on their 'fit' with local market conditions.

Corporate reputation has been tested as an influential factor of a company's financial performance (Dunbar and Schwalbach, 2000; Roberts and Dowling, 2002). It is a representation of corporate history and serves as a means of conveying strategic information about the quality of a firm's products or services in comparison with those of its competitors (Yoon et al., 1993). Herbig and Milewicz (1993) defined it as the totality of a firm's consistent attributes over a period of time. Similarly, Wartick (1992) argued that corporate reputation is the summation of a single stockholder's impression of corporate performance. As mentioned previously, there is evidence that similarly constructed aggregated measures of reputation speak most directly of a firm's reputation as an investment.

The review of existing literature indicates that these disciplines have been addressed as distinct areas in the study and are independent of one another. Consequently, very little is known regarding the relationship that brings these concepts together. Therefore, it is apparent that there is insufficient research in this area of study. As such, this study attempts to bridge this gap by bringing branding issues into the strategic-performance literature.
3.4 Consumer Perception QoS Study

Twenty first century has spread a technological revolutionary wave in India. With upcoming wireless communication technologies people are becoming more & more mobile addict. The booming revolution in Information Technology sector has pushed the India's telecom market significantly. Since past few years consumers prefer wireless mode of telephone services to wire line services. Mobility has become an integral part of customer's life. India has shown tremendous growth in past few years in terms of cellular services. As per the survey report conducted by Voice & Data by the end of Feb 2008 the mobile subscribers number has reached to 246.6 mn compared to wire line services, which is only 40 mn in numbers. Invention of Cell phones is a major improvement over the telecommunications technology of the past, and it has now become an essential commodity in today's busy life. Cell phones have become the necessity in today's competitive environment to meet the emerging global economy.

3.4.1 Service Concept

Service is a patch up activity to fulfill some one's need in the market. Service is some thing, which can be experienced but cannot be touched or seen. Services offered by service providers cannot be seen & touched, as they are intangible activities.

Some of basic definitions of service as defined by Management Gurus are:

"A service is any activity or benefit that one party can offer to another which is essentially intangible and does not result in the ownership of anything."

(Kotler, Armstrong, Saunders and Wong)

"Services are economic activities that create value and provide benefits for customers at specific times and places as a result of bringing about a desired change in or on behalf of the recipient of the service."

(Christopher Lovelock)
"Services are the production of essentially intangible benefits and experience, either alone or as part of a tangible product through some form of exchange, with the intention of satisfying the needs, wants and desires of the consumers."

(C. Bhattachargee)

The basic difference between service & product is that services are intangible but products are tangible and are required to follow some standardized procedures. Service user can specify about that particular service satisfaction only after availing it for some period of time. Some of the common service areas are: Retailing, Transportation, Cell phones, Education, Health & hospitality Services, BPO and many more.

3.4.2 Customer Expectation and Perception towards Service

As per the gap model given by Persuraman & Zeithaml there exists a gap between the customer perception & customer expectation. This gap is called as the customer gap. Customer Expectation represents the actual expected service & Customer Perception reveals the actual received service.

Customer expectations are the standards against which the perceived services are checked in order to assess the quality of a service. This basically gives what is expected & what is actually received. If any difference exists between the expected service and actually received service then that difference is called as a gap, which needs to be reduced.

3.4.3 Basics of Mobile Services

Mobile means something in motion. When it combines with services then it indicates that availing of the delivered service when in motion. Communication through telephonic media while roaming is referred as mobile or cell phone service(s).

Mobile services are nothing but Radio-communications services between ships, aircraft, road vehicles, or hand-held terminal stations for use while in motion or between such stations and fixed points on land.
Cellular service is a global radio-based service providing two-way communications by dividing the serving area into a regular pattern of sub-areas called as cells. Each has a base station having a low-power transmitter and receiver.

Cellular Mobile service means availing the telecommunication services(s) any time and any where even if the user is not stationary but roaming somewhere. According to some specific communication characteristics the entire transmission range is divided into small areas, which are called as cells. These cells are responsible for transmitting and receiving the radio frequency signal.

3.4.4 Cellular Mobile Services

Cellular mobile phone is a wireless telecommunication device comes with inbuilt mobility feature. Mobile communication technology allows mobile users to avail the roaming facility.

Cell phones / mobile phones are simple hand-held phones with built-in antennas. Sender & receiver transmit their voice, which is converted into sound waves, & then these waves travel through network to base station, from where it goes to respective destination. Base Station is a transmitting/ receiving unit responsible for controlling the transmission of a small geographical area called as a cell.

In December 1947, Douglas H. Ring and W. Rae Young both Bell Labs engineers, proposed hexagonal cells for mobile phones. The first fully automatic mobile phone system, called MTA (Mobile Telephone system A), was developed by Ericsson and was commercially released in Sweden in 1956. One of the first truly successful public commercial mobile phone networks was the ARP (Autoradiopuhelin, or Car Radio Phone in English) network in Finland, launched in 1971. ARP is viewed as a zero generation (0G) cellular network, being slightly above previous proprietary and limited coverage networks. Different Mobile generations are:

1st generation - Analog system
2nd generation - TDMA (Time Division Multiple Access) CDMA (Code Division Multiple Access)
3\textsuperscript{rd} generation - GSM 1800 MHz (Global System for Mobile Communications)
4\textsuperscript{th} generation - UMTs 1900 MHz (Universal Mobile Telephone System)

3.4.4.1 First Generation: 1G

The first commercial cellular telecom was launched by NTT (Nippon Telegraph and Telephone) in Tokyo Japan in 1979. In 1981 the NMT (Nordic Mobile Telephone System) system was launched in Denmark, Finland, Norway and Sweden. This was the first mobile phone technology that allowed international use of the mobile phone or so-called "roaming". The first handheld mobile phone in the US market was the Motorola DynaTAC 8000X.

The introduction of "cellular" phones, based on cellular networks with multiple base stations, started from 1980s. These base stations are located relatively close to each other, and service automatically "handover" between two cells when a phone moved from one cell to the other. This generation phones were working on analog system.

3.4.4.2 Second Generation: 2G

In the 1990s, 'Second Generation' (2G) mobile phone system was introduced. This generation introduced new communication feature by sending text messages through phone. This service was named as SMS (Short Message Service). The first machine-generated SMS message was sent in the UK in 1991. The first person-to-person SMS text message was sent in Finland in 1993. It also introduced some new additional features like ring tone downloading and game downloading.

3.4.4.3 Third generation: 3G

The third generation mobile phone system (commonly known as 3G) was launched with the inclusion of standardization process. It was standardized in the International Mobile Telecommunications - 2000 (IMT-2000) standardization processing. This process did not standardize on a technology, but focuses on communication
requirements. Based on WCDMA (Wideband Code Division Multiple Access) technology the third generation phone was launched.

Between 2G & 3G an intermediate system was developed, called as 2.5G system. This generation mobile phones include some of the features of 3G, not all and so does not fulfill the promised high data rates or full range of multimedia services.

3.4.4.4 GSM & CDMA technology

Digital cellular networks are the need of wireless extensions to establish the connection across the globe. For performing the transmission among the mobile users, it uses the concept of multiple accesses. Multiple access means simultaneous transmission or access from many sources to one. Multiple access transmission can be achieved through:

SDMA - Space Division Multiple Access
FDMA - Frequency Division Multiple Access
TDMA - Time Division Multiple Access
CDMA - Code Division Multiple Access

SDMA, FDMA & TDMA technologies are based on fixed assignment like frequency and time duration. But CDMA is based on different codes to separate different users in code space & so this technology allows multiple users to access the network through the shared medium without any interference.

GSM - the Group Special Mobile was founded in 1982 to support the digital transmissions & now popularly known as Global System for Mobile Communications. GSM was primarily used to support the transmission to users in roaming environment. GSM is today's most successful digital telecommunication system.
3.4.5 Service Quality Concept & Quality Parameters

Service is an intangible thing, which needs to be experienced before assessing it. Any thing can be measured by measuring their respective service attributes & factors. There are certain Service Quality parameters as defined by the professional bodies in order to measure the service quality of corresponding service sector.

3.4.5.1 Service Quality

Quality is a key requirement in every field. In terms of Industrial growth quality plays an important role & so should be understood and defined properly. Different management Guru's in different ways defines quality. But the basic concept remains same i.e. "Meeting to the Need of Customer".

In most generalized way the Quality term can be defined as "The inclusion of all specified features and characteristics as defined for product or service and its ability to satisfy the given needs as per the requirement of user while using it."

"A predictable degree of uniformity & dependability to low cost and suited to the market" (By Dr. Edward Deming)

"Quality is conformance to requirements." (Philips Crosby)

"Quality is a degree to which a set of inherent characteristics fulfills the requirements." [ISO 9000]

Customer wants to avail different services offered to them by service providers. Delivered service will become as the Quality Service if it meets the customer expectations. But customer expectation depends upon the customer perception, which may differ from person to person.

As per Parasuraman, Zeithaml & Berry the service quality is defined as:

Service Quality = Perception - Expectation
Service quality is nothing but the difference between the service expectation & service actually received by the customer. Customer has certain expectation about the service. If the customer experience the same service as they expect then this difference will be zero and we can say that the service quality is very good. Higher the difference of above equation lower will be the service quality.

The customer perception is influenced by various factors, which may result in change in service quality as well. Various such factors could be like: Age, gender, Occupation, Global competition & Technological changes. The perception of younger generation of service quality could be different from the older one. Similarly a working corporate professional perception could be different from a businessperson or from a housemaid. That is why the perception should be taken into consideration by service providers to meet the customer requirements.

**3.4.5.2 Measuring the Service Quality**

Measuring could be done qualitatively or quantitatively. Any thing can be measured by evaluating the related factors & respective attributes. Considering various related attributes we can monitor the Service quality. Attribute needs to be measured to get the quality.

Quality measurement is concerned with the observed value for some service attributes & then by comparing these values against standards, it is possible to get the quality status of respective product or process.

A number of large companies have introduced the quality metrics for improving the quality management processes. In general by collecting metrics on several attributes and defects, the entire Quality Management Process can be improved because metrics may help to identify the strong & weak attributes. By improving the weak area(s) companies can improve the quality.
A metric is a type of measurement, which relates to a system, process or related documentation. The use of systematic service measurement and careful monitoring of metric definitely can improve the overall service quality.

In terms of cellular mobile services, various service providers who provide cellular services are assessed with respect to the process metrics parameters. Service providers give cellular services like customer care, data transmission, multimedia service, billing service etc. to their customer. They measure the quality of service given by them to customer in terms of service parameters. Various general service parameters are like: reliability, usability, efficiency, portability. Quality Metrics is designed against such parameters. Specific to cellular mobile services the Quality Metrics includes following factors & attributes, which affects the service quality.

3.4.5.3 Factors & Parameters affecting the quality of Cellular Mobile Services

Mobility, Connectivity, call drops, Portability, customer-care, Billing service, Messages Services, fare information, Number of complaints, Activation time, Voice Quality, faults repairing, Mean Time to Repair (MTTR), Billing Credibility

The technical savvy public now demands for high quality of product as well as service. As defined in ITU-T (International Telecommunication Union) Recommendation E.800 the Quality of mobile phones can be measured in terms of Quality of Service (QoS) performance parameters and Network Performance parameters. QoS parameter depends upon user perception. And perceptions are always referred against expectations. Expectations are dynamic & changes over time, age, gender.

Service Quality Measurement requires the measuring of respective service quality attributes and factors. The Mobile service quality is measured through cellular service parameters & factors, which are mentioned above.
3.4.6 Service Quality & Customer Satisfaction

Service Quality and customer satisfaction are two closely related terms. Service quality can be assessed in two ways: 1) Is it meeting standard? & 2) Is it satisfying the customer?

As defined by Oliver
"Satisfaction is the consumer's fulfillment response. It is a judgment that a product or service feature, or the product or service itself, provides a pleasurable level of consumption-related fulfillment."

Customer satisfaction is related with the type of service quality, if the quality of service provided by the service provider is good then this leads to the higher customer satisfaction. As defined by Parasuraman, Zeithaml & Berry the service quality depends upon customer perception & customer expectation. For measuring the service quality, it is necessary that the service provider with respect to the customer expectation as well as the customer perception should understand the service quality parameters. This will help in getting the better service quality and hence higher level of customer satisfaction.

The customer expectation with reference to various service quality parameters differs from person to person. Such change in perception can affect the customer satisfaction.

Quality is defined, as meeting customer needs. Meeting customer needs requires that those needs be understood. VOC "Voice of Customer" is one of the ways for understanding the customers need & so measuring the service quality. The "voice of the customer" is the term used to describe the stated and unstated customer needs or requirements.
3.4.7 Quality Metrics

Quality measurement is concerned with calculating some value for related service quality attributes. By comparing these values against standards, it is possible to get the quality status of any process. Quality Metrics are basically defined for improving the quality management processes. Metrics can be defined by collecting the observed values of Quality of Service attributes.

Metrics can be classified in two broad categories: the product metrics & the process Metrics. But as per the basic definition the service quality is associated with the customer satisfaction. And so quality metrics can be classified as: Mean Time to Failure, Mean Time to Repair, Customer Complaints & Customer Satisfaction Metrics. Service Quality Metrics of mobile services can be designed by observing the experienced service on mobile service parameters.
3.5 Brand Image & Service Quality

In recent years, brand management and branding have established its importance strategically for different companies (Post, 2008; Kapferer, 2008; Keller, 2008). Smith (2004) suggested that in service industry "brand management requires brand managers to take a holistic view of the brand that transcends the marketing and service function and makes it a rallying cry for the firm". Brand has also been described as "the impressions received by consumers resulting in a distinctive position in their mind's eye based on perceived emotional and functional benefits" (Shoemaker, Lewis, Yesawich, 2007).

Service quality defined by Gronroos (1984) as "the result of an evaluation process, which helps consumer compare his expectations with his perception of the service received; in other words, he places the perceived service and the expected service opposite one another." Javalgi et al., (2006) claimed that during the decision making process, customers have very few cues while buying services while an established brand performed as crucial role in form of risk reducer and purveyor which makes the decision making process more easier (Davis, 2007; Kayaman & Arasli, 2007). Forgacs (2003) argued that hotel industry is heavily used branding strategies because of their success.

Consumers perceive the same service quality in different ways. This difference in perception is most likely influenced by corporate image. Companies can plan corporate brand image before implementing marketing communications, and shape brand image through various marketing strategies. That's why Bailey and Ball (2006) suggested that "brand management can be improved through more effective brand differentiation strategies" like their service quality, word-of-mouth communication, advertising techniques etc.

Brand image is a set of associations with the brand, revealing both association and image represented perceptions of either objective or subjective reality (Aaker, 1991). Keller (1993) clarifies the concept, defining it as "perceptions about a brand as reflected by the brand association held in memory". Brand image management is
significant in deciding whether or not the employee is connected with the organization by influencing the strength of an individual's identification, and the evolving trend of brand image is noted in strategic importance (Dutton, Dukerich, & Harquail, 1994; Gray & Smeltzer, 1985). Keller, (2003) treated the concept of brand image the reasoned or emotional perceptions of the customers which they associate with a particular brand. Therefore, brand image is one of the key components that enable hotel companies to gain a superior advantage among others. Some scholars viewed brand image to be "directly related to the product category within which the brand is marketed" (Martinez, Chernatony, 2004).

On the other hand, Martínez and de Chernatony (2004) found out that there was no agreeable consensus in literature for the empirical measurement of brand image and the basic reason for this is the multi-dimensionality of the concept. More or less same were the findings of Dobni and Zinkhan (1990) who claimed that because of the confusing variety of work on defining the concept of brand image, at first it may result to ambiguity in selecting the best scale for its measurement. To exemplify its multi-dimensionality, brand image has also been taken as an element of brand personality (Hosany, Ekinci, & Uysal, 2006) and there are examples in which literature significantly relates it to customers' self-concepts (Belk, 1988; Aaker, 1996; de Chernatony & Dall'Olmo Riley, 1998; Solomon, 1999).

A very interesting study of Pitt, Opoku, Hultman, Abratt, and Spyropoulou (2007) maintained the notion that even branding is itself is entirely the process of creating and building a brand image. And according to them, 'creating a brand image means' an effort that "engages the hearts and minds of customers". Gronroos (1984) emphasized the extreme importance of brand image for service firms because when the customers use service, they see the firm and its resources by their judgment of the interaction between them and their service providers. His findings depicted that the customers formulate image as they see the components of the firm and develop their perceptions. The definition by Kurtz and Clow (1998), "the overall or global opinion customers have of a firm or organization" depicts threat customers show high tendency of patronizing the firm if they develop high perceptions of its image.
Service serves as the most salient phenomenon that customers can experience and perceive. Hence, quality of firm's service mainly builds up the image of that particular brand. Similarly, Nguyen and LeBlanc (1998) explained that overall brand image of the company is formed by the combined perceptions of service quality as a result of frequent service experiences. Many researchers (e.g. Gummesson and Gronroos, 1988) reported brand image to be the key factor in the evaluation of overall service quality. Keller (1993) studied brand image as a perception, held in consumer memory, of an organization which serves as a filter to influence the perceptions related to operational aspects of the organization. In his study of airline service, Ostrowski et al. (1993) argued, "positive experience over time (following several good experiences) will ultimately lead to positive image". Kim and Kim (2005) observed that "brand image and service quality perceptions share too many features". Aydin and Ozer (2005) found that perceived service quality directly determines the perception of brand image.
3.6 Perceived Service Quality

According to many researchers declared perceived service quality model, it has appeared that when customers measure service quality, they will compare their perceptions with real performance from the service provider with what they believe to be the expectations of service performance in their experience (Parasuraman et al., 1985; Zeithaml et al., 1988).

Snoj et al. (2004) defined perceived service quality as how well the client's measurement of the overall of the service. It acts as the mental comparison between price and quality that is offered by service providers.

The communication method between the service provider and the receiver of a service is affected by the environment in a specific location where they work together and operate (Ford et al., 1998; Zineldin, 2004; Robicheaux and El-Ansary, 1975). Thus, perceived service quality of communication can show a patient's level of overall satisfaction or overall service quality (Ganesan, 1994). Lim and Tang (2000) stated that when customers decide to choose a hospital, perceptions of service quality is a basic element. The perception of patients about health care quality is important to health care provider's success, because it will affect patients' satisfaction and profitability of hospital (Koska, 1990; Donabedian, 1966; Williams and Calnan, 1991).

Parasuraman et al. (1988) supported that SERVQUAL scale can provide an instrument for evaluating service quality. There are five dimensions which are tangible, reliability, responsiveness, assurance, and empathy. SERVQUAL scale can be applied to fit the characteristics or the requirements of a specific investigation of a particular organization.

Zineldin (2006) stated that SERVQUAL quality is a classification system concept. Moreover, the five quality dimensions (5Qs) model is an instrument that insures a reasonable level of reliability, validity and significance. Zineldin (2000) expanded
SERVQUAL models into a framework of five quality dimensions: quality of object, process, infrastructure, interaction and atmosphere.

The atmosphere in a particular environment where the service provider and receiver co-operate and operate will affect the interaction procedure between both of them (Ford et al., 1998; Zineldin, 2000; Robicheaux and EL-ansary, 1975).

Zineldin (2006) supported that the environment or atmosphere can influence the perceived service quality by developing or making it worse.
3.7 Company Performance Study

3.7.1 ARPU and Market Share (Subscribers)

Average revenue per user (ARPU) and number of new subscribers are the most commonly used performance metric for telecommunication firms. ARPU is the average revenue a company generates from a user and gives an indication of the areas driving revenue growth.

Over the years, telecom companies have relied on these metrics to judge their performance and track the position of their competitors. Strategies for market entry and decision to launch new products and services are heavily reliant on ARPU. Companies generally tie up their business models in a move to increase their ARPU and on the other hand change them if it reports a lower ARPU. Recently companies have raised their concerns on declining ARPU in many regions.

Operators are increasingly concentrating on data services and other value added services (which are considered to be high revenue earning than voice traffic) in order to increase their ARPU. The tool should be used cautiously for following aspects.

3.7.1.1 ARPU

ARPU is simply calculated as total revenue divided by the total number of subscribers over a certain period of time. The anomalies arise while measuring total revenue and number of subscribers to calculate ARPU. First, the time period of the calculation varies form company to company. Some companies quote the figures yearly, quarterly, half yearly or on a monthly basis which can be a source of discrepancy when comparing the results over a certain period of time. As for the number of subscribers, ideally those subscribers should be taken into account who contributes to the revenue during that period. But in some cases the number of subscribers at the beginning of the period is considered while in some the number of subscribers at the end of the period or the average of the two is considered. Total revenue is the amount received by the operator which may not be wholly retained. For example, the mobile termination rate is also included under the total revenue which is not a part of the
revenue of the firm. It may also include the revenues generated from sources other than subscribers such as advertising etc. which tends to overestimate the ARPU figure and give wrong signals for growth synergies.

3.7.1.2 Subscription Rates in Different Regions

ARPU depends on the penetration level of particular region. In a country where the penetration level is low, ARPU is a good measure since at this stage one connection generally equates to one subscriber and it is easy to identify the revenue earning areas. At this stage even subscriber base gives a good indication about the market share. But as the penetration rate grows the number of 'actual' subscribers may fall behind the number of connections as individuals use more than one connection. This implies that the telecom expenditure of one subscriber is divided among two connections leading to a downward bias in the estimation of performance and unidentified areas of growth.

In addition to this, relative penetration rate in rural and urban areas will have an impact on the level of ARPU especially in countries like India literacy rate is low among the rural population. For example, if a company is adding new subscribers mostly in rural areas, potential to generate revenues through data oriented services like mobile or internet will be low due to low literacy rates in these areas. Therefore, in developing countries like India, ARPU will give a better picture of future revenue potential when segmented between rural and urban.

3.7.1.3 Stage of the Subscription

A commonly held view is that a decreasing ARPU is associated with a declining profit which actually may not be the case. As penetration rate grows, more and more low-end subscribers i.e., pre-paid subscribers come into existence that are regarded as non-revenue earners. But they may generate higher profits since no additional costs like billing and collection costs, handsets subsidies have to be incurred as compared to the post-paid subscribers. On the other hand, increased data services are thought to be high revenue earning which may incur higher costs (like upgrading the network), putting pressure on the profitability.
Companies in an effort to bring down the churn rate often give out incentives to high-
end customers in order to retain them and on the other hand leave out the inactive
prepaid accounts who do not contribute much to the revenue. As a result of this,
ARPU may show an increase not because of the additional revenues generated by the
high end customers but only because the total number of subscribers has gone down.
This may give wrong signals to the growth strategies adopted by the operators. Also
the high costs of incentive plans are not taken into account which may have a negative
impact on the profits.

When penetration level reaches the saturation level, companies tend to add customers
who are highly price sensitive and tend to shift to other service providers for very
small decreases in price. Thus ARPU may not be good performance metric when the
market is driven by price wars and is inherently characterized by low ARPU.
3.8 References


- ASEAN India synergy sectors Report 2005.

- Associated chambers of commerce and industry of India 2005.


• Bunthuwun L., Sirion & Howard C. (2010) "Effective Customer Relationship Management Of Health Care: A Study Of The Perceptions Of Service Quality, Corporate Image, Satisfaction, And Loyalty Of Thai Outpatients Of Private Hospitals In Thailand"


• BW Marketing whitebook, 2005, pg.54.


• C. Bhattacharjee "Service Marketing : Concepts, planning & implementation", Excel Book, 1st edition, the quality definition jointly developed by American
National Standards Institute (ANSI) and the American Society for Quality (ASQ) pg. 494

- C. R. Kothari : "Research Methodology Methods & Techniques", revised 2nd edition, New Age Publication


• Department of telecommunication statistics given in Voice & Data Magazine (Cyber media Publication) Vol. 4, Issue 10, April 2008 Pg. 40


• Dunbar, R L M and Schwalbach, J (2000) Corporate Reputation and Performance in Germany. Corporate Reputation Review, 3(2) April, pp. 115-123

• Dutt and Sundaram, Indian Economy, Edition, 2004


139


- Economic survey, GOI, 2002 – 3


• In C. Surprenant (Ed.), Add value to your service. Chicago, IL: American Marketing Association.

• In M. E. Goldberg, & R. W. Pollay (Eds.), Advances in consumer research. Association for consumer research, 110-119), UT: Provo.


• Keller, K.L. (2008), Strategic Brand Management: Building, Measuring, and Managing Brand


Measuring Customer Satisfaction, A review of approaches By IdeA Knowledge 23rd March 2006 on www.idea.gov.uk


- Mobile User's Satisfaction Survey 2007 Voice & Data, The business of Communications, Cyber Media Publication April 2008 Pg. 40


- National telecom policy 1999


- Sandeep Budki & Arpita Prem "The Magic Figure" (pg. 37) on Voice & Data Magazine (Cyber media Publication) Vol. 4, Issue 10, April 2008


- Smith, S.L.J. (2004), "Brand experience", in Clifton, R. and Simmons, J. (Eds), Brands and Branding, Bloomberg Press, Princeton, NJ.


- Telecom Regulatory Authority of India mission Retrieved on 24/05/2007 from home page of www.trai.gov.in


- Tom Farley & Mark van der Hoek Cell Sector Terminology Posted at 08:55 PM on January 01, 2006 on Private Telecommunication Expertise, Retrieved on 24/05/2008 from //www.privateline.com/mt_cellbasics/2006/01/cell_and_sectorterminology.html


- Valarie A. Zeithaml & Mary Jo Bitner "Customer satisfaction definition" in "Services Marketing : Integrating Customer focus Across the Firm" page 86


- Vavra, Terry G. (1992), after marketing: How to Keep Customers for Life through Relationship Marketing, Homewood, IL: Business One-Irwin.


- Voice & Data Magazine The business of Communications, Cyber Media Publication Vol. 4, Issue 10, April 2008 page 10

- VSNL 16TH annual report 2002


- World telecommunication development report 2002


