CHAPTER II

LITERATURE REVIEW
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2.1 Introduction

This chapter presents a review of the literature identifying the important variables and highlighting the significant findings of the previous research studies to develop a sound conceptual framework (Sekaran and Bougie\(^1\), 2010) for the research under study. Customer satisfaction and the factors which influence customer satisfactions and their relationship with customer satisfaction will be the key areas under study. This chapter will also focus on the corporate image, marketing mix elements of telecom service, especially pricing or telecom tariff structures, customer service and value added service and the marketing techniques of service providers.

2.1.1 Growth and challenges of Telecom service sector

World Telecommunication Development report (2002)\(^2\) found that an overwhelming majority of the countries allow competitions in Telecommunication services like fixed, mobile and internet market segments. There is tremendous enhancement and growth of Telecom services in every nuke and corner of the country. The new Telecom policy 1999 laid down a clear road map for future reforms contemplating the opening up of all the segments of the Telecom sector for private sector participation (Shyamal Ghosh\(^3\), 2003).
India’s Telecommunications sector is now among the most deregulated in the world and presents potentially lucrative opportunities for service providers. The tremendous growth in telecom service sector and increasing competition along with rising opportunities, have prompted the service providers to devise appropriate marketing mixes to win the marketing strategies.

The competitive nature of the Indian Telecom Market leads analyst to predict that there will be a spate of take over and only major service provider will survive (zita and Kapur^4, 2004). Creating and keeping the profitable customer should be the mantra to guide the service providers and delivering service quality and customer satisfaction is the key challenges of the business firm (Bhattacharjee^156, 2006; Lovelock^149 et al., 2011).

2.2 Marketing Mix

Borden^5, N (1964) claim to be the first to have used the term marketing mix and that was suggested to him by James Culliton^6 (1948) who described the role of the marketing manager as a “mixture of ingredients”. The lists of elements of the marketing mix presented by Borden are Product planning, Pricing, Branding, Channels of distribution, Personal selling, advertising, promotion, packaging, display, servicing, physical handling and fact finding and analysis.

McCarthy^7 (1964) refined this further and defined the marketing mix as a combination of all of the factors at a marketing manager’s command to satisfy the target market. McCarthy, thus regrouped and reduced Borden’s 12 elements to the most popular 4Ps called Product, Price, Promotion and Place.
Palmer\(^8\) (2004) stated that Marketing mix is a conceptual framework that identifies the marketing managers to configure their offerings to suit consumers' needs and can be used as a tool to develop long and short term strategies and programmes.

Moller\(^9\) (2006) said that marketing mix has been influential in the development of marketing theory and practice. Thus marketing mix for marketing of goods for consumer market consists of 4Ps. The popular version of this concept has come under attack from among service marketing area. According to Roger Brooks bank\(^150\) (1994) it is necessary to assemble and tailor appropriate marketing mix so that target customers could consider the mix superior to the one offered by competitors and it will result in the firm's choice of competitive advantage. Gronroos\(^151\) (1994) in their studies regarding marketing mix and relationship marketing revealed that the components of the marketing mix can change a firm's competitive position.

The marketing mix approach was subjected to criticism like incomplete consideration of the needs of the customers, disregarding services etc. (Gummesson\(^153\), 1994; Raffiq and Ahmed\(^152\), 1995). Booms and Bitner (1981)\(^10\) proposes extension of 4P to 7P framework to include Process, Physical evidence and Participants in service marketing. Judd (1997)\(^11\) proposes the 5th element as people taking into account human resource factor. But in spite of the criticism, the marketing mix approach was given wide acceptance (Jobber\(^154\), 2001). According to Zeithaml\(^155\) et al., (2008), some modifications in the strategies of 4Ps are also needed when applied to services and the concepts of expanded mix were adopted by service marketers namely: people, process and physical evidence in addition to the traditional 4P.
2.2.1 Product

Hyungoh LEE and Sang-Young HAN\textsuperscript{139} (2002) observed that two groups currently competing in the world digital mobile telecommunication industry are the CDMA group and the GSM group. It is stated that analogue technology is generally referred to as first-generation technology (1G) and CDMA is included in second generation technology (2G). Telecommunication industry was moving into the third-generation phase (3G) and the cellular mobile service products based on 3G have already been offered to customers.

Amit Kumar, Yunfei Liu, Jyotsna Sengupta and Divya\textsuperscript{112} (2010) have studied the evolution of Mobile Wireless Communication Networks and revealed that the first generation (1G) had fulfilled the basic mobile voice, while the second generation (2G) had introduced capacity and coverage. The third generation (3G) had introduced the mobile broadband, which would be further realized by the fourth generation (4G). The 4G systems would be fully IP-based wireless Internet with access to wide range of telecommunication services, including advanced mobile services, supported by mobile and fixed networks, low to high mobility applications and wide range of data rates, in accordance with service demands in multiuser environment.

Irani, Dwivedi and Williams\textsuperscript{145} (2009) developed a Technology Acceptance Model (TAM) to examine broadband adoption by consumers. The study has found that the behavioural intentions to adopt broadband are determined by the constructs such as perceived usefulness, self-efficacy, social influence and perceived resources and ease of use of technology.
Jyoti Choudrie and Heejin Lee\(^{146}\) (2004) have found that broadband service was developed successfully in South Korea and identified the success factors such as Government leadership, facilities based competition, the PC Bang phenomenon, pricing, some aspects of Korean culture, geography and demographics. PC Bangs, a business model, are equipped with high-speed leased lines and multimedia computers.

As per Rajiv Kumar\(^{113}\) (2002) wireless network was introduced in the telecommunication service sector as an attractive alternative to wire line or landline services, since the wireless networks have flexibility, mobility and effectiveness. Wireless networks are having higher bandwidth, greater speed and minimum costs.

Kallio, Tinnila and Tseng\(^{104}\) (2006) revealed that the customer base could affect the success or failure of new product launches related to mobile cellular communication service. The product should be easy-to-use and affordable. The design of the handset, content and service package offered by the service provider would attract the consumers as in the case of NTT DoCoMo which effected many variations from the industry-accepted standard during the introduction of I-mode, which finally proved success. The introduction of Vodafone Live mobile internet services also proved early success due to the same business model. Services like photo exchanges, location services, game application downloads, and video-on-demand, GPS location-based services, instant messaging, SMS and e-mail with some location based services are named content design.

Heejin Lee, Sangjo Oh and Yongwoon Shim\(^{147}\) (2005) revealed that the competition in broadband internet sector has driven innovations in both products and business models and generated new business opportunities.
The e-entertainment sector like MMORPG (one form of online games) has created a “virtual world” in which thousands of players participate. Broadband internet indirectly helps to increase the penetration of wired line sector as physical wired telephone lines are to be connected in ADSL modem. It would pay the way for the users’ request for mobile internet, as it could satisfy the need to use the internet while moving.

According to TRAI (2012) General Packet Radio Service (GPRS) is a service which enable users the access to Internet on the mobile. It is generally called mobile internet or GPRS. These include basically data based application services such as an Internet browsing, MMS, entertainment, Games, Mobile TV, music/video/wall paper downloads etc.

As per Prakash Nath (2001) and Ram Narain (2001), the telecom service providers offer many auxiliary service products using the intelligent network services like Toll free service, India Telephone card, Account Card Calling, Virtual Private Network, Tele-Voting, Premium Rate Service, Universal Access Number etc. with the aim of increasing the revenue and augmenting facilities to customers.

Baker, Sciglimpaglia and Saghafi (2010) have studied the demand for value added services in the mobile communications service. The primary usage of a mobile phone service is voice and the service providers sell that primary product first and subsequently sell ancillary products or add-on services in support of the primary brand during or after the mobile service subscription. Audio infotainment, video, ring tones, downloaded games, SMS games and text messaging, mobile chat, mobile payment, sports, video games, music, television game shows, information services etc. are the add-ons or services offered by the service providers.
According to Anantharam\textsuperscript{108} (2003), Centrex stands for Central Office Exchange service and that auxiliary service provides a virtual private branch exchange (PBX). It allows customers to combine subscribers into a group without being restricted by the location of the subscribers. Telecom service providers have offered this product to group of customers in flats, residential complexes, universities, hotels etc. to earn additional revenue.

As per Ganesan\textsuperscript{109} (2005) and Shubhangi R Chaudhary\textsuperscript{148} (2006), world-wide interoperability for microwave access called as WiMax provides broadband connectivity and can offer solution to last mile problem by connecting homes and business offices. High speed internet access is possible without wired connection and distances up to 50km are supported.

As per TRAI\textsuperscript{110} (2010), consultation paper on National Broadband Plan fixed broadband refers to technologies at speeds of at least 256 Kbit/s, in one or both directions, such as DSL (Digital Subscriber Line), cable modem, high speed leased lines, fibre-to-the-home, power line, satellite, fixed wireless, Wireless Local Area Network and WiMax. Mobile broadband refers to technologies at speeds of at least 256kbit/s, in one or both directions, such as Wideband CDMA (WCDMA), known as Universal Mobile Telecommunications System (UMTS) in Europe; High-speed Downlink Packet Access (HSDPA), complemented by High-Speed Uplink Packet Access (HSUPA); CDMA 2000 1xEV-DO and CDMA 2000 1xEVDV. Access can be via any device (handheld, computer, laptop or mobile cellular telephone etc). These products are widely deployed by telecom service providers in India.
Huang, Hsieh and Chang\textsuperscript{111} (2011) have revealed that certain companies use mobile technologies to promote latest products or send e-coupon to consumers as part of their marketing strategies and automate business processes to increase productivity, reduce operational costs, increase customer satisfaction, and improve decision-making. It was stated that e-commerce transaction carried out through mobile device could be viewed as M-commerce and one of the most popular m-commerce applications is location-based services (LBS), the real-time services providing users with exact location and relevant information about their destination.

BSNL provides telecom products like wireline, wireless, GSM Mobile, CDMA mobile, Internet, Broadband, MPLS-VPN, VSAT, VoIP services, Internet dial up, managed leased line etc. The Intelligent network service products like Free phone service, India Telephone card, Account Card Calling, Virtual Private Network, Tele-Voting, Premium Rate Service, Universal Access Number etc. Value added service like Voicemail, Text messaging, Roaming, Play games on handset, Download ringtones and icons, Voice-activated dialing, Wireless Internet access, SMS-based information services, Picture messaging (MMS) and Download games etc. (bsnl\textsuperscript{157} site).

Tata tele services (TTSL) provides CDMA based mobile service, CDMA based fixed wireless services, wireline services and value added services. GSM telephony services are offered using Tata DOCOMO. The fixed wireless telephony called brand Walky, wireless mobile broadband named brand Photon are also some of the product variety. Value added services like SMS, MMS, entertainment updates, horoscope, cricket scores, ring tone downloads, games, missed call alerts etc. are also offered (Tata
tele service\textsuperscript{158} site). Reliance communication provides wide range of telecom services spreading with fixed line, mobile, broadband, value-added services like news updates, video clips, ring tones, astrology, mobile banking, bill payment etc. (Reliance infocom\textsuperscript{159} site). Bharti Airtel provides of vide range of telecomm services like fixed telephone services, mobile phone services in the GSM platform, broadband and value added services (Airtel\textsuperscript{160} site).

Vodafone Essar Limited provides services like fixed line, prepaid and post-paid GSM mobile and hosts of value added services like text messaging, video messaging, e-mail, chota recharge, group SMS service, busy alert service, fashion tips, recharge anywhere, bhakti songs, stock alert, voice SMS etc. and fixed broadband (Vodafone\textsuperscript{161} site). Idea cellular Limited provides prepaid and post-paid GSM mobile, message service, net services and value added services like entertainment services, SMS, MMS, WAP, Java games and Mobile Magazine etc. (idea cellular\textsuperscript{162} site)

According to Ganesan\textsuperscript{40} (1999) and Rama Mohana Rao and Srinivasa Prasad\textsuperscript{164} (2011), telecom service providers offered integrated services digital network called ISDN service to customers as an auxiliary service product. It is a powerful auxiliary product for provisioning services like voice, data and image transmission over the telephone line through the telephone network. An ISDN subscriber can establish two simultaneous independent calls. As per the authors a high speed satellite based VSAT network of telecommunications provides high speed data transfers and voice communication service covering the whole country. The telecom service providers make use of VSAT for offering various data communication services to customers. Data terminals of customers can be connected to VSAT and transmit data.
As per Rama Mohana Rao and Srinivasa Prasad (2011), the telecom service providers used to provide high speed internet access service called Wi-Fi services at convenient public locations called Hot spots. The service provider’s uses multi-protocol label switching technology called MPLS to build secure virtual private network called MPLS VPN. According to the authors, the managed leased line (MLLN) is another auxiliary service product offered by service providers for effective provision of data circuits with speed of n x 64kbps up to 2 mbps and used for internet leased lines and international principle leased line (IPLCs).

An innovative telecom service product offered by service providers are fleet management solution. It is an on line tracking system to manage fleets comprising of trucks, car carriers, tankers etc. The user has options to receive tracking information via email or sms as well as calling the customer on a toll-free number (Rama Mohana Rao and Srinivasa Prasad, 2011).

### 2.2.2 PRICE

Stephen Hoch et al., (1995) have suggested that consumer characteristics as well as the extent of competition would impact the pricing decision. The result has shown that educated customers, consumers with lesser income constraints are fewer prices sensitive whereas larger families with isolated income are more prices sensitive. Stores located away from competitors would display fewer prices sensitive than located close to competitors.

Biggs and Kelly (2006) found that broadband pricing strategies have major implications for the future development of telecommunication markets in terms of subscriber growth, online behaviour, market
transparency and choice of service provider. Residential broadband users who were using dial-up connections are now enjoying internet access at a speed of more than 256 Kbit/s resulting into the explosive growth of household broadband users to 200 million or more around the world. The study has identified that flat-rate or unmetered pricing, time-based pricing and volume-based pricing are some of the broadband pricing strategies offered by the providers. In the case of flat-rate pricing, customers are billed a fixed amount irrespective of use whereas they are billed according to the time spent online in the time-based pricing and according to the data content downloaded for volume-based pricing.

Juha Munnukka\textsuperscript{117} (2008) found that customer’s price perceptions are positively related to purchase intentions and the satisfaction with service pricing influence their formation of price perceptions. Experience of service usage, Gender and age were found to impact the customer’s perceptions differently. The results of the study have shown that customer’s price perception were found to be significant with their price sensitivity only in the case of Fixed telecom services and not in respect of Mobile telecom services. The result also found that the users were not price conscious if they have combined telecom services like fixed line, fixed line with internet service via ADSL and mobile service with or without data card for internet services.

Juha Munnukka\textsuperscript{118} (2005) has examined in his studies pertain to the Finnish mobile service markets and found that customers with moderate usage of mobile services are least price sensitive, while intensive and low-end users are sensitive to price changes and the customers’ price perceptions and innovativeness levels were indicators of their price sensitivity. It was also observed in his study that customer satisfaction is a
significant factor in predicting the customers’ price sensitivity levels in the mobile, fixed-line and combined (both mobile and fixed) segments. Eeva-Mari\textsuperscript{119} et al., (2004) revealed that the pricing schemes and plans of calls originated from cellular mobile services are quite complex because of differentiated prices, monthly access fee, etc. Their study found that the declining cellular mobile tariffs and phone prices constantly over time did not have a significant influence on the diffusion and adoption of cellular mobile subscriptions.

Judith Mariscal\textsuperscript{120} (2009) has studied the market structure of the cellular mobile communication service in Latin America and has analysed the impact of usage of mobiles by low-income group. It was revealed that the aggressive campaign by the service providers resulted into the reduction of average revenue per user (ARPU) in spite of the increases in users. The results of the study did not identify a strong association between market concentrations and pricing. It was found that the growth in mobile service penetration among low income group were due to the prepaid services and incoming call access without payment.

Youngsoo Kim\textsuperscript{123} et al., (2009) developed a structural model to examine user demand for voice and SMS services duly measuring the own and the cross-price elasticity of these services. It was revealed that the cross-price elasticity between two services has important implications for optimal pricing and promotion decisions. The study has examined the interaction between voice and data services and found that SMS and voice services are small substitutes and an increase in the price of voice minutes would induce a small increase in the demand for SMS. It was observed that voice and SMS are differentiated services for serving to different applications and needs and therefore, a choice to send a SMS might not
diminish the need to make a voice call and vice-versa. Kieran O’Doherty et al., (2007) have studied the motivational factors that influence the purchase of mobile phone content among young Australians and found that the mobile phone was perceived primarily as a communication tool and customers were inclined to spent money on mobile phone for use other than voice calls and SMS. The mobile phone was considered by customers as an inferior channel for entertainment and information when compared to television, magazines, and the internet. Consumers were wary of deceptive advertising practices for mobile content and many have had bad experiences with the content providers who sell mobile content. Customers were not found having an established relationship and trust with the content providers. Many consumers would like to access ‘‘free’’ content even though they enjoy content experience.

Hongjai Rhee and Sangkyu Rhee (2009) revealed that appropriate and optimal pricing strategies are the most vital for the success of quick developments of telecommunication services. It was remarked that the relationship between price elasticity and the average expenditure level of consumers could be either positive or negative depending on the prevailing price level of the product and found that heavy user of mobile service are substantially more elastic to the price of calls in Korea. According to Bhattacharjee (2006), the price determination is to be based on demand, cost, customer, competitive, profit, Government policy, barriers in industry product and legal consideration. The service provider has to adopt a pricing strategy that conveys value to the customers.

As per Mohana Rao and Prasad (2011), Telecom regulatory authority of India’s involvement and competitions in telecom services have pushed the prices down and service providers become more innovative in
their tariff offers. Offers like life time validity, special vouchers, 2 year validity coupon etc. launched by service providers were in that direction.

The pricing rates offered to customers by telecom service providers are called Tariff plans. In order to maintain transparency in tariff offers to customers and protection against the tariff hike, the Telecom Regulatory Authority of India frequently notifies the rates at which the provision of various telecom services are to be priced (TRAI\textsuperscript{165}, 2006 and TRAI\textsuperscript{166}, 2012).

According to Ramachandran\textsuperscript{167} (1999), a new telecom tariff structure in the form of a Telecommunications Tariff Order 1999 was announced by the TRAI. This tariff structure TTO (1999) was issued with the aim of rebalancing the existing tariff structure. Once the tariff plan is offered to customers it will be available to them for a minimum period of six months.

2.2.3 Place

As per Gibson and Cleofhas\textsuperscript{142} (2009), delivery of products or services to the final user is called Place or Distribution. The stages involved in delivering the product or service to the market are known as distribution channels. There are two types of channels, a direct channel of distribution and indirect channel of distribution. Direct channel involves the movement of goods and services from producer to consumers without the use of independent intermediaries where the companies can control over their entire marketing programs. An indirect channel of distribution involves the movement of goods and services from producer to consumers via independent intermediaries.
Akroush et al. (2006) in their study on the relationship between brand-building factors and branding benefits, have revealed that service delivery processes are to be developed focusing customers so as to build brands in their eyes and the service delivery activities should enhance the required image in the marketplace.

Amini et al., (2012) in their study on the effectiveness of marketing strategies and corporate image on brand equity as a sustainable competitive advantage, have revealed that good channel performance enhances corporate image. As per them, good distribution channel attracts the attention and interests of the potential customers resulting into exchange of positive word of mouth.

2.2.4 Promotion

Aisha Khan and Ruchi Chaturvedi (2006) have given an insight into the various promotional strategies implemented by various cellular mobile service providers in India due to competition. The prominent promotional tools like celebrity endorsements, loyalty rewards, discount coupons, special season offers, festival discounts, business solution, talk time offers and other innovative advertising campaigns were formed part of the promotional strategies of the service providers and those strategies were used to capture youth segments, push back the competition and increase market share. The study concluded that as per the Cellular Operators Association of India (COAI), the cellular subscriber base was increased from 1.2 million in 1999 to 42.12 million in April 2005 and that significant growth could be due to the influence of Promotional strategies.
As per Ndubisi and Chew (2006), sales promotion tools such as price discounts, free samples, bonus packs in-store display etc. are very effective in creating awareness and attracting customers. Mihir Dash and Viswanathiah (2006) have analyzed that the telecom service providers Airtel and Hutch offered several special promotional schemes like unlimited free SMS, unlimited free outgoing calls within home network, and full talk-time etc. to attract the student segments in Karnataka. It was found that the market share of Airtel and Hutch have been increased due to the effect of those promotional strategies as many customers have switched from other service providers in favor of Airtel and Hutch.

Kapil Sharma (2011) has revealed that cellular phones and services were included in the most advertised product/service category list and cellular companies became very important and popular in among all sections of the society. The researcher has studied the effect of advertisements on the sales and promotion of cellular services and identified the effective advertising strategy in cellular services business. The study has found that the advertisements through electronic media played a guiding role for the rural and urban population and appearance of celebrities in advertisements contributed great extent in the change buying behaviour of rural customers and advertisements in media would influence the buying behaviour for the sale of mobile phone service among the young customers of the age group of 15-20 years in the urban segment.

Promotional mix is the marketing communications programme for any business including telecom service and various factors influencing promotional mix are product factors, market factors, customer factors, budget factors, advertising, personal selling, sales promotion and publicity (Ravi Shanker, 2002, Adrian Palmer, 2005). Promotion makes
customers aware about the company and its products available for them and induce the consumer to make a purchase (Olatokun and Nwonne\textsuperscript{83} (2012). Obasan and Yusuf\textsuperscript{84} (2012) in their study on the effectiveness of promotion in the Nigerian telecommunication industries have found that promotion is a good marketing tool for survival, sustenance and expansion of telecom business. Telecom service providers used to develop extensive promotion strategies and may deploy famous celebrities as brand ambassadors as a promotion tool to get word of mouth publicity (Dwivedi and Sharma\textsuperscript{82}, 2011).

Rajamanickam and Vadivalagan\textsuperscript{92} (2011) have revealed that the traditional telephone service offered by BSNL was facing stiff competition from cellular mobile services as customers were found surrendering their landline connection and getting mobile connections. Promotional offers like low monthly rent, less call rate, more free calls, festival offers, and other similar promotional measures were the immediate requirements for the survival of BSNL landline connection.

Simon Kwok & Mark Uncles\textsuperscript{135} (2002) have revealed that sales promotions were more effective when they provide benefits that are congruent with those of the promoted product and explored the congruency framework with the impact of culture. Monetary promotions (e.g., shelf-price discounts, coupons, rebates and price packs) might provide immediate rewards to the consumer whereas it was delayed rewards for them in case of non-monetary promotions (e.g., sweepstakes, free gifts, loyalty programs). It was found that culture did not appear to have a significant impact on consumer responses to sales promotion.
Liisa Ndapewa Kaapanda\textsuperscript{88} (2012) in the study on the telecommunication service in the northern region of Namibia found that free calls and free SMSs, low rate charges, promotions with discount, refund and free sample, family and friends and customer care would influence the customers in repurchasing the products from the same service provider again.

James Manalel, Jose and Siby Zacharias\textsuperscript{136} (2007) have explored whether the phenomenal growth of sales promotion was perceived favorably by the consumers and examined the differential effect, if any, of two types of sales promotion namely cash discount and free gift on consumer’s perception. It was found that sales promotion schemes are not perceived favorably and there was no differential effect between the promotional schemes like cash discount and free gifts.

Oyeniyi Omotayo \textsuperscript{137}(2011) has studied the effect of sales promotion on customer loyalty in the telecommunication industry as to build customer loyalty using the marketing communication tool sales promotion was essential for attracting the attention of the customers of mobile telecommunication services. It was found that there was positive relationship between sales promotion and customer loyalty and observed that non-loyal customers were more prone to switch to other service providers as the result of their sales promotion strategies.

Frank Bass, Norris Bruce, Sumit Majumdar and Murthi\textsuperscript{128} (2007) revealed that the providers have to understand the individual effects as well as the interaction effects among the different versions of advertising on overall demand which would allow them to allocate their budgets over multiple themes of advertising like price advertisement, product
advertisement etc. more effectively. The authors have developed a model to study the effect of advertising on the measure of demand considering the multiple themes of advertising which might be scheduled by the providers for the same product category as the firms concurrently run several themes in their advertising campaigns.

Gozbert Kakiziba\textsuperscript{129} (2008) has revealed that advertising could help to build up a long term image of brands for triggering more sales as well as maintaining existing customers. This study investigated the satisfaction level of customers with advertised brand and the effect of strategic advertising on long term profits to company in regard to management of customer relations and brand loyalty. The result has shown that Celtel customers are more loyal to Celtel brands and its advertising strategies encourage higher brand loyalty when compared to non Celtel customers.

Promotional offer with short-term price discounts such as special sales, coupons sales, rebates and refunds etc. may boost sales in the short run. In the long run, sales promotion may influence positively on brand image (Yoo\textsuperscript{140} et al., 2000). Kim and Hyun\textsuperscript{141} (2011) in their study regarding the relationships between promotion and corporate image as well as loyalty, have found that promotion has a positive impact on corporate image and loyalty and personal selling was noted as a key component of promotion.

Gerard Tellis\textsuperscript{130} (2009) has suggested that changes in media, product, target segments, advertising scheduling and advertising content are more likely to yield changes in sales. The result of the study has shown that if advertising is effective then its effects might be reflected early in the life of a campaign but if early advertising is ineffective then continuance of
the same might not create or enhance its effectiveness. The findings suggested that advertisers have to target loyal buyers and non-buyers of their products/services with various levels of exposures and heavier exposures need to be made for new consumers and brands.

Zain-Ul-Abideen and Salman Saleem\textsuperscript{131} (2011) have studied the effectiveness of advertising and its influence on consumer buying behaviour in respect of telecom services in Pakistan. It was revealed that advertising may serve as a major tool in creating product awareness in the mind of a potential consumer to take eventual purchase decision and the advertisers have to reach prospective customers and influence their awareness, attitudes and buying behaviour. Advertisement is one of the effective tools of integrated marketing communication to emotionally motivate consumers to buy the products. The study investigated the relationship between environmental response and emotional response with attitudinal and behavioural aspect of consumer buying behaviour and found that the emotional response of consumer purchase behaviour could result into a strong association with the consumer buying behaviour.

Zameer, Saeed and Abass\textsuperscript{132} (2012) investigated the mobile phone buying behavior of consumers in Pakistan and compared the behavior of urban and rural consumers. The study has found that the rural consumers are more price conscious than urban consumers. Rural consumers focus on the functions of mobile phone on the other hand urban consumer’s focus on style and brand image of mobile phone. The study suggested reviewing the advertisement campaigns and modifying their mobiles according to the needs of consumers.
As per Almossawi (2012), telecom service providers have to concentrate on more effective advertising campaign compared to their competitors as customers may switch to other providers of advertising. Pughazhendi et al. (2012) has revealed that the advertisers and service providers might use single or multiple celebrity endorsement for high and low involvement products and services to expand their customer base and promote their product.

Abhijit Roy and Sanjit Kumar das (2012) have revealed that marketers could explore new forms of communication, like experimental, entertainment and marketing in mass advertising and Vodafone, with its unique advertisement campaign like pug, happy to help service etc., have introduced an innovative advertisement strategy and released “Zoo-Zoo” advertisement campaign which generated much interest and curiosity among all the segments of the Indian society. It was observed that the various services offered by Vodafone such as chota recharge, group SMS service, busy alert service, fashion tips, recharge anywhere, bhakti songs, stock alert, voice SMS etc. were shown to the viewers through some funny & catchy Zoo-Zoo ads and each of the advertisement was specific to one particular VAS so as to make the customer understand the services. It was found that Vodafone was successful in drawing the attention of the majority of customers quickly towards those ads and the VAS offered by it.

2.2.5 Extended marketing mix

According to Zeithaml et al. (2008), people, physical evidence, process are considered as extended marketing mix applicable mainly for services. As per Rama Mohana Rao (2011), the importance of the service employees are well recognised and captured in the people element of the
marketing mix. They have to face customers at one end and organisation at the other. The service employees have to satisfy the needs of the customers as well as employers. Not only the service employees but outsourced or contract-workers and consumers are also considered as the elements of People (Govind Apte, 2004). According to Lovelock et al. (2011), people are the key input for delivering service excellence and competitive advantage. Delivering service quality and satisfaction to customers are the key challenges of the telecom sector and role of employees in improving service quality and productivity in a competitive market are paramount important.

As per Durga Anupama et al., (2012), physical evidence includes all aspects of the organization’s physical facility (the services cape including exterior and interior attributes) as well as other forms of tangible communication. They have studied the perceptions, expectations and satisfaction on physical evidence mix of cellular services marketing and revealed that physical evidence would play a crucial role in services marketing to attract and retain the customers. It was found that the factors namely Office interior, Literature and office exterior, Technology used and other physical facilities, Brand image and manuals and Maintenance of standards would influence the customers’ expectations, perception and satisfaction in respect of Tata tele service, the cellular mobile service provider.

The actual procedures, mechanisms and flow of activities in which the service is delivered are termed as Process. According to Zeithaml et al., (2008), the complex telecom service features requiring series of actions to complete the process are to be described in a simple and understandable method.
2.3 Customer satisfaction

Tse and Wilton\textsuperscript{19} (1988) has defined customer satisfaction as the perceived discrepancy between prior expectation and actual performance. According to Fornell\textsuperscript{21} (1992) customer satisfaction is the outcome of an evaluation process. As per Churchill and Surprenant\textsuperscript{177} (1982), it is a post-consumption phenomenon. Oliver\textsuperscript{176} (1980) opined that it is cognitively based whereas Cadotte\textsuperscript{178} et al., (1987) is of the opinion that it is affective based.

According to Boulding\textsuperscript{173} et al., (1993) customer satisfaction has two concepts named transaction-specific and the cumulative-specific. Cumulative satisfaction is the overall evaluation of customers of their purchase and consumption experiences (Edvardsson\textsuperscript{174} et al., 2000) and as per Olsen and Johnson\textsuperscript{175} (2003) transaction-specific satisfaction occurs when customers evaluate their expectations with the one which they receive during and after each service encounter.

Michael, Johnson and Fornell\textsuperscript{20} (1991) suggest that the primary antecedents of satisfaction are a product’s perceived performance and the customer’s expectations regarding that performance and there would be a positive relationship between experience and satisfaction. The satisfied customers would become increasingly satisfied when experience and expectations grow due to positive evaluations by them. But, the dissatisfaction of the dissatisfied customers may increase further due to their negative evaluations. Customer complaints, products repurchase, brand switching and other behavioural consequences may be used to reflect latent satisfaction.
Fornell\textsuperscript{21} (1992) has revealed that the impact of customer satisfaction and customer loyalty were not the same for all industries and loyal customers might not be satisfied customers whereas satisfied customers tend to be loyal customers. It was seen that higher customer satisfaction would increase customer loyalty, prevent customer churn, lower customers price sensitivity, reduce failure cost and operating costs, increase customer retention, improve the advertising effectiveness and enhance business reputation.

Woo and Fock\textsuperscript{22} (1999) have identified the determinants among cellular mobile communication service users and obtained four determinants of customer satisfaction viz. transmission quality and network coverage, pricing policy, staff competence and customer service. The result of the study has shown that the service providers have to formulate appropriate pricing policy, rather than competing on customer services and other supplementary services and should focus more on transmission quality and network coverage as the core attributes of their service offerings.

Mohamed Zairi\textsuperscript{23} (2000) has revealed that customer satisfaction would lead to repeat purchases, loyalty and to customer retention. Satisfied customers were most likely to share their experiences with other people and might say good things and to recommend the product or service to others whereas the dissatisfied customers could behave and respond differently and share their unfortunate experience with many other customers. Hansemark and Albinson\textsuperscript{24} (2004) have revealed that satisfaction was an overall customer attitude towards a service provider or an emotional reaction to the difference between what customers anticipate and what they receive, regarding the fulfillment of some need, goal or
desire. It was noted that customer satisfaction would directly influence customer retention and firm market share and found that the strongest connection between retention and satisfaction strategies were relationship and confidence.

Lam et al., (2004) studied on the basis of the cognition-affect-behaviour model that customer satisfaction mediates the relationship between customer value and customer loyalty and that customer satisfaction and loyalty have significant reciprocal effects on each other. A satisfied customer’s affect toward a service provider could motivate the customer to patronize the provider again and recommend the provider to other customers.

Aydin, Ozer and Arasil (2005) have measured the customer satisfaction in the Turkish mobile telephone market and revealed that in order to protect the customer base of cellular mobile communication service from reduction, the service providers have to win customer satisfaction and customer loyalty. The study found that the switching cost had a direct effect on customer loyalty and a moderator effect on both customer satisfaction and trust.

Ah-Keng Kau and Elizabeth Wan-Yiun Loh (2006) have investigated the effect of service recovery on customer satisfaction in the mobile phone service industry in Singapore. It was remarked that the action taken by a service provider to address a customer complaint regarding a perceived service failure could be referred as service recovery. The findings have indicated that satisfaction with service recovery was positively related to trust and word of mouth behavior. The study has shown that behavioral outcomes in terms of trust, word-of-mouth and
loyalty were higher for complainants who were satisfied compared to those who were dissatisfied and failed service recovery efforts might lead to loss of trust and bad publicity through negative word-of-mouth communications. Anil Gupta (2006)\textsuperscript{15} says that when there is service product failure, the customer will react to such failure and companies have to effectively design the corrective measures for the products’ recovery strategy. If the company plans service recovery mechanism, it could lead to higher customer satisfaction level. It has been observed that if service failure persists, then a small percentage of those dissatisfied customers would complain and get the failure corrected. Even though silent majority of them never complain, they may defect and engage in negative word-of-mouth publicity against the service provider. Non-complainers are one of the least loyal customers, a company can have. The service provider has to regain customer confidence through immediate service recovery which would get back a disappointed customer to a state of satisfaction.

K. A. Silva\textsuperscript{28} (2009) found that factors such as Value delivery, Solution Provisioning, Assurance, Reliability and Responsiveness play an important role in customer satisfaction. The results indicate that service providers should invest more in increasing the customer satisfaction and retention. Phil Doriot and John Gilbert\textsuperscript{29} (2007) found that customers with bundled services are more satisfied with their service provider than those without bundled services. Customers tend to be more likely to purchase additional services from a company when they have a satisfying experience with them. Research Group analyzed customer satisfaction for video, broadband Internet and wireless in each service area and found that quick response times to outages, effective call centre support and timely resolution to service/billing issues will reduce churn and build customer loyalty. Innovation in Technology, Rates/Price plans are important for
acquiring and securing customers and reliability is extremely helpful to retain customers for all services, including Telephony, Internet and IPTV. If service providers listen to their customers and respond with better customer service then it can result into higher customer satisfaction, lower churn and a growing customer base.

Ranaweera and Prabhu\(^{30}\) (2003) has revealed that customer satisfaction is an important determinant of customer retention. The author has developed several hypotheses regarding the main and interaction effects of customer satisfaction, trust and switching barriers on retention and tested those hypotheses on data from a large-scale mail survey of fixed line telephone users in the UK. The survey has found that customer satisfaction have strong positive effects on customer retention.

Ruth N. Bolton\(^{31}\) (1998) studied a positive effect of overall customer satisfaction on the duration of the relationship with the cellular mobile service provider. Customers form expectations about the value of the service from their prior cumulative satisfaction. The relationship between duration times and satisfaction is stronger for customers who have more experience with the firm and smaller perceived losses due to service encounter. Service recovery is considered as an opportunity to delight a customer and create a stronger relationship and higher customer satisfaction.

Gustafsson, Johnson and Roos\(^{32}\) (2005) examined the effects of customer satisfaction, affective commitment and calculative commitment on customer retention in a study of the telecommunications services. Affective commitment captures the trust and reciprocity in a relationship. Calculative commitment captures the competitiveness of the value
proposition and reflects the viability of competitive offerings. Through the study the authors operationalize customer retention using the degree of churn that occurs in a customer’s use of fixed-phone service, cellular phone service, modem-based Internet service or broadband Internet service. It is predicted that affective commitment and calculative commitment each has a negative effect on churn. It is also found that customer satisfaction has a consistent negative effect on churn and a positive effect on customer retention.

Ofir Turel and Alexander Serenko\textsuperscript{33} (2006) have examined the antecedents of customer satisfaction and loyalty in respect of cellular subscribers in Canada based on American Customer Satisfaction Model (ACSM). It was revealed that customer loyalty in the mobile services context was the favorable attitude of the customer towards a specific service provider that would lead to the repurchase likelihood of additional services from the same provider and retain with that provider if it increase the prices or the competitor decreases the prices. The authors have suggested that Repurchase Likely hood (RL) and Price tolerance (PT) were the components of loyalty and the degrees of Perceived Quality (PQ) and Perceived value (PV) were the key factors affecting customer satisfaction in the case of mobile services. It was seen that the service providers might go beyond voice communications and turn to Value added services (VAS) like Voicemail, Text messaging, Roaming, Play games on handset, Download ringtones and icons, Voice-activated dialing, Wireless Internet access, SMS-based information services, Picture messaging (MMS) and Download games for staying competitive and increasing revenues.
Dr. Rajasekhara Mouly Potluri, Mangnale\textsuperscript{34} (2010) studied the customer satisfaction levels in the of Ethiopian Telecom corporation on service interaction, service delivery process, customer complaint handling procedure, service providing ability and overall satisfaction levels and customers expressed significant dissatisfaction in all aspects.

Hanif, Hafeez and Riaz\textsuperscript{35} (2010) showed in their research study focusing customers of Telecommunication companies in Pakistan that the factors significantly impact customer satisfaction are price fairness and customer services. Telecommunication service is almost homogenous and even a small difference in price would influence customer behaviour. The study has shown that most of the customers are influenced by the tariff on calls and sms packages.

Ahasanul Haque, Nuruzzaman and Abdul kalam\textsuperscript{36} (2011) studied the customer satisfaction towards mobile phone services in Bangladesh based on Fishbein’s multi attribute attitude model. Good network coverage, low call rate, pulse facility, T and T facility, friends and family number, Internet and GPRS connection, SMS and voice mail service, customer care service and free talk time and bonus facility are the nine factors which could affect the level of customer satisfaction and outcome of the study based on those factors can be used for improving service quality and formulating marketing strategy.

Jackie L.M. Tam\textsuperscript{37} (2008) revealed that if customers continue to make repeat purchases, then they have some positive evaluations for the brand. But customers who are not familiar with a brand may not anticipate the level of services to be received. The effect of satisfaction on repurchase and recommendations differs among high, moderate and low familiarity
customers. The study found that the effect of satisfaction on behavioural intentions was stronger for the high familiarity group. Expectations play an important role in satisfaction and repurchase behaviour among low familiarity customers. It is therefore necessary to deliver services beyond the expectations of low familiarity customers for influencing future purchases among them. The results of this study also reveal that the role of expectations in satisfaction evaluation seems to diminish with experience and perceptions of performance appear to dominate among high familiarity customers.

Lori K. Molinari, Russell Abratt, Paul Dion (2008) indicated that the key factors in getting a firm’s customers to repurchase are value, satisfaction, disconfirmation of expectations and word-of-mouth transmission. The result of the study has shown that there was significance for the relationship of customer satisfaction and word-of-mouth transmission to their repurchase intention.

Pavlos A. Vlachos and Adam P. Vrechopoulos (2008) found that consumers’ intentions are positively and directly influenced by three higher-order service evaluation constructs, namely service quality, satisfaction and value. Therefore, consumers use both cognitive and emotional criteria when evaluating a mobile entertainment service.

Johnson, Sivadas, Garbarino (2008) found that customers perceived risk has much potential for influencing satisfaction, perceived value and perceived quality. But affective commitment of the customers may reduce risk perceptions. Affective commitment has been identified in telecommunications services and it refers to a customer’s emotional bonding to a firm as well as their sense of belonging and identification with
the firm. Hence, companies need to measure the risk perceptions associated with their service and try to minimize those risks. Gerpott, Rams and Schindler\textsuperscript{42} (2001) have found that customer retention, customer loyalty and customer satisfaction are important goals for the telecom service providers in the German mobile telecommunications market and overall satisfaction of the customers in mobile services were influenced by the four key drivers of the customer value of cellular services namely network quality, price-paid, customer-care and personal benefit. Network quality is reflected by the indoor and outdoor coverage and the clarity of voice reproduction without any connection breakdown. The price-paid is the access and usage charges to be paid for the network. Customer care is reflected by the quality of information exchanged between the service provider and customer, the response of the provider for the enquiries of the customer and action therein. Personal benefit is reflected by the perception of the customer against the service and features of cellular communication and how far those to be beneficial to them personally. But mobile service price, personal service benefit perceptions and number portability had the strongest effects on customer retention as well.

Kim, Park and Jeong\textsuperscript{43} (2004) in the research study on Korean mobile telecommunication services have found that higher levels of customer satisfaction are associated with higher levels of customer loyalty. The study found that for enhancing customer satisfaction mobile carriers must focus on service quality and offer customer-oriented services. The factors with a significant impact on customer satisfaction are found to be call quality, value-added services and customer support. The Customer support is another area where service providers must strive to minimize customers’ inconvenience through timely disposal of subscriber’s complaints to their satisfaction.
Muhammad Mohsin Butt, Ernest Cyril de Run\textsuperscript{44} (2009) have found that customer satisfaction of cellular phone users in Pakistan constitute factors such as Price, Network Coverage, Signal Quality, Ease of usage and Service support. Measuring customer satisfaction is important to improve service quality and retain existing customers on a long-term basis. The results of the research revealed that signal reception is the most important performance indicator while measuring the transmission related components of a cellular service provider. This means the customers are actually concern with better voice transmission quality. The Company would achieve higher brand image if better voice qualities are ensured.

Fatima Ali, Imran Ali, Rehman, Yilmaz, Safwan and Afzal\textsuperscript{45} (2010) have found in his research paper that there are significant relationship between price reasonability and customer satisfaction. This employs that fairness of price is the strongest determinant of customer satisfaction and advantageous to retain customers for longer period of time. Call clarity is also found to be having significant relationship with customer satisfaction and customer retention. User friendliness of service, Value-added services, Support services have significant influence on customer satisfaction. Lower the customer complaints, higher will be the customer satisfaction.

Zaim, Turkyilmaz, Tarim, Ucar and Akkas\textsuperscript{46} (2010) have concluded that corporate image, perceived value and perceived quality are positively affects customer satisfaction. Perceived quality construct evaluates customization and reliability of a given product or service. Khuhro, Azahr, Bhutto, Imran and Shaikh\textsuperscript{47} (2011) in their research study in respect of a telecom service industry in Pakistan have found that call clarity, value added services, price and customer support significantly impacts customer satisfaction.
Rajasekara Mouly and Haile Michael¹⁸ (2010) have assessed the fixed-line telecom customers' perception of the quality in respect of the after-sales services provided by Ethiopian Telecom and found that the delays in attending complaints, telephone interruptions during rainy seasons, lack of clarities in telephone bills, increase in the frequency of faults etc. are the main reasons for customers dissatisfactions.

Lee⁴⁹ et al. (2001) has identified pricing, core services and value added services for measuring customer satisfaction towards mobile phone service in France. Coverage and clarity aspects are mainly considered in core services whereas easy access and precision of billing service are in the part of overall value added services. The result of the study has shown that switching costs play a significant role in the satisfaction-loyalty link only for the economy and standard groups and for mobile lovers, switching costs do not affect loyalty. It was shown that the customers who have economy and standard type of plan consider the quality of core services most important, whereas mobile-lovers show their strong inclination to value-added services. It was also found that mobile-lovers, being heavy users, are less sensitive to the pricing aspects of services and might look for a good range of supporting services. The study has concluded that the service providers would implement a feature-based differentiation of service products than using a particular price discrimination scheme.

Lim⁵⁰ et al. (2006) have identified factors such as customer services, billing system, location services, entertainment services, messages/data services and network quality for measuring customer satisfaction towards mobile cellular services.
Ali Turkyilmaz, Coskun Ozkan\textsuperscript{51} (2007) revealed that customer satisfaction would reduce price elasticity, business cost, failure cost, and the cost of attracting new customers and assumed to be a significant determinant of repeat sales, positive word-of-mouth and customer loyalty. The authors developed a customer satisfaction index model for Turkish mobile phone sector and the results concluded that the factors such as pricing policies, product quality, company image are the antecedents of overall customer satisfaction. The findings also have shown that customer satisfaction and company image have positive and significant effects on customer loyalty. Customer satisfaction enhances customer loyalty towards the Turkish mobile phone service.

Aron O’Cass and LiemViet Ngo\textsuperscript{52} (2011) found that service firms have to concentrate on branding and customer empowerment to enhance customer satisfaction. Customer’s participation on marketing efforts is possible through customer empowerment practices. Market orientations enable market sensing and understanding customer needs and it enhances customer satisfaction through service branding and customer empowerment.

Kaisa Snellman and Tiina VihtkariCustomer\textsuperscript{53} (2003) revealed that customer dissatisfaction in technology-based service encounters were most often related to failures in technology, service design or in the service process. In the technology based environment, problems could be solved automatically and customers’ complaints were not being registered always. But most of the filed complaints were found ineffective.
TRAI\textsuperscript{54} (2008) reported that customer satisfaction is the major determining factor in the emergence of new services, setting standards and designing of network. Therefore, the customer requirements and expectations are paramount consideration in reviewing quality of service standards. The present quality of service parameters included for basic service (wireline) are provision of a telephone after registration of demand, fault incidences and repair, mean time to repair, grade of service, call completion rate within a local network, metering and billing credibility, customer care, response time to the customer for assistance, refund of security deposit. The quality of service parameters included for cellular mobile telephone service are call set-up success rate, service access delay, blocked call rate, call drop rate, connections with good voice quality, service coverage, response time to the customer for assistance, billing complaints, metering and billing credibility, resolution of billing/charging complaints. It was revealed that customer perception is an essential factor in the successful provisioning of a telecom service. Customer perception is the main criterion by which the service providers can assess and measure the true value of the quality they provide. Customers perception could be influenced by a variety of factors which will affect their judgment of quality, such as customers’ awareness of services, customers’ expectations, customers’ recent experiences, advertising and marketing etc. Different parameters for customer perception of telecom service leading to customer satisfaction are service provision, billing/charging performance, help services/customer care, network performance, reliability and the availability, maintainability, supplementary services/value added services and overall customer satisfaction.
Paolo Guenzi and Ottavia Pelloni (2004) revealed that customer satisfaction is a fundamental driver of customer loyalty in service markets. The interpersonal relationships of the customers with the customer service executive could be a powerful tool to build customer satisfaction and loyalty towards the company and reduce the risk of customer switching.

Goutam Chakraborty, Prashant Srivastava and Fred Marshall (2007) revealed that three drivers of customer satisfaction are reliability, product-related information and commercial aspects were identified. Reliability means reliability of the supplier and adherence to delivery schedule. Product-related information is technical specification for products and breadth of product line and commercial aspects are competitive prices, credit policy and return policy and warranty coverage of a supplier.

Ling Chang, Ee and De Run, Ernest Cyril (2009) have investigated the factors that influence customer satisfaction and customer loyalty in Malaysian telecommunication services. It was found that the supporting services, product (handy, reliable coverage, friends and family lines) and promotional efforts of the firm were variables associated with customer satisfaction and convenience, services, satisfaction and cost were for customer loyalty. It was indicated in the finding that telecommunication service providers should look beyond price wars to keep their customers satisfied and loyal.

Loke, Taiwo, Salim, and Downe (2011) have examined the impact of product and service delivery factors on reported levels of service quality within a single GSM provider and found that reliability, responsiveness, assurance and empathy positively influenced customer attitudes in terms of
customer satisfaction and loyalty except in the area of tangibility. The appearance of the physical aspects provided by the GSM service provider were not appreciated by the customers and the providers have to concentrate on offering prompt and reliable services to attract, serve and retain the customers.

Jusuf Zekiri\textsuperscript{59} (2011) has revealed that the customer satisfaction was determined by the customers’ perceptions and expectations of the quality of the products and services. It was concluded that Reliability and responsiveness were the most important factors for customers’ satisfaction with service quality followed by assurance and empathy. Reliability as the service dimension in respect of mobile telecommunication services as expected by the customers might be provision of caring, individualized attention of the organization to them, responsiveness might be the attentiveness and promptness in dealing with their requests, inquiries, complaints and problems and empathy could be approachability, sense of security and the effort of the providers to understand their need.

2.3.1 Service quality

Service quality was measured by Parasuraman et al. (1985\textsuperscript{85}; 1988\textsuperscript{86}; 1991\textsuperscript{99b}) using an exploratory qualitative research and a conceptual model of service quality named “the gaps model” was developed and the customers judge the quality of the service by comparing the service they actually receive along the five quality dimensions with what they expect to receive. Thus they defined service quality as the discrepancy between customer’s expectations and perceptions. If perceived quality exceeds expectations, then customers are satisfied, if performance falls below expectations, they may be dissatisfied.
Further research study on the customers’ perceptions of service quality based on the 5 SERVQUAL dimensions was made by authors (Parasuraman, Berry, and Zeithaml, 1991\textsuperscript{100}a; 1991\textsuperscript{101}c; 1993\textsuperscript{102}; 1994\textsuperscript{103}; 1994\textsuperscript{114}; Zeithaml\textsuperscript{163} et al., 1990 ; 1993). The SERVQUAL was subjected to criticism by various researchers like (Babakus & Boller\textsuperscript{169}, 1992; Cronin & Taylor\textsuperscript{170}&\textsuperscript{171}, 1992 ; 1994).

Some researchers have developed SERVPERF model, the performance only approach, as an alternative method for measuring service quality (Cronin and Taylor\textsuperscript{170} (1992). The author made a comparative study of the SERVQUAL and SERVPERF models and used both methods to measure service quality. The result of that finding was that the performance-only approach can be worked better. Lee, Lee and Yoo\textsuperscript{172} (2000) supported the concept of the performance-based approach (SERVPERF).

Rakshit Negi\textsuperscript{60} (2009) has explored the role of service quality as perceived by customers of cellular mobile communication services of Ethiopian Telecommunication Corporation (ETC) while determining overall customer satisfaction. It was found that overall service quality would associate with and contribute significantly to the overall satisfaction of mobile communication subscribers and transmission quality and network coverage would be helpful in improving customers' perceived quality of mobile communication services.

Yonggui Wang and Hing-Po Lo\textsuperscript{61} (2002) have observed that the factors, service quality, customer satisfaction and customer value were very important for the business success of service providers. Service quality was measured in China’s telecommunication industry using
SERVQUAL model for the five dimensions reliability, tangibility, responsiveness, assurance and empathy by adding another dimension “network quality” as another antecedent of customers perceived service quality. It was found that all service quality factors had significant and positive impact on customer satisfaction.

Zillur Rahman\textsuperscript{62} (2006) has dealt with the measurement of service quality at cellular retail outlets in the Indian environment with a focus on perception and expectation of service quality from the customer's perspective. It was found that the customer contact employees play an important role in affecting customer perception of service quality and point of customer contacts need to be reduced to minimum by maintaining an effective service delivery system.

Fujun Lai\textsuperscript{65} et al. (2007) have used the SERVQUAL model in China's mobile telecommunication and it was shown that the SERVQUAL is a valid instrument for measuring service quality. They have identified “service convenience” as an important additional dimension of service quality in China's mobile services sector.

Johnson and Sirikit\textsuperscript{66} (2002) have used SERVQUAL with five dimensions reliability, responsiveness, assurance, empathy and tangibles in their study of Thai Telecommunication mobile industry and it was found that tangibles emerged as the most important factor for the Thai telecommunication customer and the results indicated that perception and expectations of service quality level have no significant difference.

Ranaweera and Neely\textsuperscript{67} (2003) reported that service quality is an important driver of customer retention in fixed line telephone service. The price sensitive customers may not accept increase in price to achieve
higher service quality. Fixed line telephone service, where negative Price perceptions are associated with high service quality perceptions, service quality alone will be inadequate to retain customers. A combined service quality-price strategy is required in the telecommunication sector. Service Providers can offer different types of special packages based on price to the more price-sensitive customers.

Anita Seth, K Momaya, and H M Gupta (2008) studied a valid and reliable instrument to measure customer perceived service quality for cellular mobile services incorporating both service delivery as well as technical quality aspects. Service quality aspects in respect of cellular mobile needs to be measured using a seven-dimensional structure namely reliability, assurance, tangibles, empathy, responsiveness, convenience and customer perceived network quality. The study also highlighted the relative importance of service quality attributes and has shown that responsiveness is the most important dimension, followed by reliability, customer perceived network quality, assurance, convenience, empathy and tangibles.

Uchenna Cyril Eze et al., (2008) examined the influence of Malaysian ISPs’ service quality on customer satisfaction. In this study, customer satisfaction is defined using four variables such as pricing structure, convenience in procedures, value-added services and Internet service functionality. Service quality can be enhanced by focusing on five dimensions i.e. tangibles, reliability, responsiveness, assurance and empathy. The quality products, front line personnel, physical facilities, brochures and cards may represent ISP tangibles. The capacity of the ISP to provide and maintain internet connection with the promised band width without any interruption can be considered as reliable. Responsiveness is measured by the total time taken by the ISP to resolve the complaint
reported by the customer regarding the problems in the internet service. Assurance refers to the ability of the ISP to inspire trust and confidence on the customers through courteous behaviour and demonstration and guidance of internet services by the employees. Empathy refers to the individual attention given by the ISP on all requirements of the customers. Results found that proper attention of the ISP towards improving responsiveness, empathy, tangibles and assurance would increase customer Satisfaction.

Dr. Muhammad Sabbir Rahman\(^1\) (2012) has studied the determinants that would influence the customer perception of telecom customers in Bangladesh. It was explained that brand name, availability of various products and services, perception of customers about the employees of the company, the sellers reputation, quality of the products, sales history, confidence of the customers in the brand etc. could be considered as corporate image and the performance of the service right at the first time, prompt and error free service etc. could be treated as the service quality required for the company. The study has shown that the service quality and corporate image would influence the customer perception of telecom customers positively.

Sunil Mithas, Krishnan, Fornell (2005)\(^1\) found that CRM application helps to improve service quality as companies gain intangible benefits such as improved customer knowledge and customer satisfaction for success in increasingly competitive markets.
Peeru Muhammed, Sagadevan (2002)\textsuperscript{17} stated that the relationship marketing not only improves service quality but also ensures the customers are benefitted through personalized care, reduction of customer stress, increased value for money, customer empowerment etc.

Blery\textsuperscript{70} et al., (2009) has examined the relationships among service quality, price and customer loyalty in the Greek mobile telephony sector. Repurchase intention and positive word-of-mouth were used as behavioural components to measure customer loyalty. The findings have shown that the perceived price was negatively associated with repurchase intention. It was observed that the price being an important factor influencing customers’ usage levels and repurchase intention, especially in the telecommunication sector, service providers should ensure to keep prices down in order to increase usage. The findings also showed that there are relationships between service quality and customers repurchase intention in mobile telephony and the service quality was an important decision-making criterion for service consumers and any efforts to improve quality would be beneficial.

Sattari Salehi, Sangari and Peighambari\textsuperscript{71} (2009) have evaluated service quality in Iran’s mobile telecom market based on the well-known SERVQUAL model, with modifications made by Wang Po-Lo (2002), who had applied network quality as the sixth dimension, to reflect the industry attributes of mobile telecom. It was revealed that network quality was indicated by excellent indoor and outdoor coverage and in the clarity of voice reproduction, without any connection break-downs for the performance in mobile telephony based on a qualitative study of organized customer focus groups. The empirical results have shown that four of six dimensions of service quality i.e. network quality, empathy, assurance and
reliability were strong determinants of service quality in Iran’s mobile telecom market. Muhammad Ishtiaq Ishaq72 (2011) has shown that service quality has contributed in overall customer satisfaction. The study found that three dimensions of service quality (value added service, customer service, and pricing system) have significant positive effects on customer satisfaction. Findings revealed that the price, schemes/plans, billing accuracy and billing issues require more attention.

Shanthi Venkatesh87 (2008) has examined the behavior of the users, in the context of their expectations pertaining to fixed-line services versus their satisfaction of the same. The author has identified 30 variables to study the expectation and satisfaction levels of the fixed line telephone users namely caller identification (CLIP), call forwarding, call wait, data storage, digital display, call alert, dynamic locking, touch dial, selectable ring tones, conferencing, wireless option, dial-a-service, silent mode, 24 X 7 customer care, installation, voice clarity, short messaging service (SMS), remote telephony management, built-in speaker, parallel ringing, product demonstration, online payment, multiple subscriber numbers, auto call back, internet access services, voice mail box, complaint redressal, exchange services, tariff options and billing accuracy.

Petzer and De Meyer93 (2011) have attempted to determine in their study different generations’ perceived service quality of services and satisfaction levels with services provided by cell phone network service providers of South Africa, as well as their behavioral intentions towards those providers.
It was found that the perception of young generation consumers regarding the service quality and satisfaction levels towards the cellular mobile communication service in South Africa, were significantly lower compared to other generation. It was suggested that the providers should focus their efforts to satisfy the needs, and improving the service satisfaction of young Generation consumers so as to retain them for future.

2.3.2 Customer loyalty

Kim and Lee\textsuperscript{76} (2010) investigated the key drivers that establish and maintain customer loyalty to mobile telecommunications service providers. The results of the study have shown that corporate image, brand awareness, service price and service quality are strong antecedents for establishing customer loyalty in mobile communications service markets.

Aydin and Özer\textsuperscript{77} (2005) have revealed that loyal customers might buy more, accept higher prices and have a positive word-of-mouth effect and the cost of acquiring new customers was much higher than the cost of retaining existing customers. The study has examined the relationship between corporate image, perceived service quality, trust and customer switching costs and customer loyalty in the Turkish mobile telecommunication market and the results have shown that even though the perceived service quality was required it was not a sufficient condition for customer loyalty.

Martensen\textsuperscript{78} et al., (2000) pointed out that customer loyalty is driven by the product itself if it is simple to get the product evaluated. However, in markets that are more complex to evaluate like fixed and mobile telecom service markets, brand image has the greatest impact on customer satisfaction and loyalty.
Jessy John\textsuperscript{79} (2011) has explored the factors that would influence customer loyalty of BSNL mobile services and the study has revealed that the customer base of BSNL was thinning in the recent past. It was found that trust, image, VAS, relationship, network quality, and customer service and complaint resolution were some of the factors that would influence customer loyalty of BSNL. Wahab and Momani\textsuperscript{18} (2010) revealed that the satisfactory performance of customer relationship management would result in repeat purchase, word-of-mouth, retention, cross buying, brand loyalty and customer satisfaction. The studies conducted by them in Jordan mobile phone services have found that e-service quality and ease of use was positively significant towards CRM performance.

Rosemond Boohene and Gloria Agyapong\textsuperscript{80} (2011) studied the determinants of customer loyalty in Vodafone (Ghana). It was found that service quality and image were having positive relationship with customer loyalty. Switching cost, trust, relationship marketing strategies and complaint handling were identified to reflect the corporate image of the firm. The study suggested that the providers should ensure service quality by enhancing staff skill and providing fast and efficient services and through long standing relationship with customers.

Ilias Santouridis and Panagiotis Trivellas\textsuperscript{81} (2010) examined the effect of service quality and customer satisfaction on customer loyalty, in respect of Cellular mobile communication in Greece and found that the service quality dimensions like customer service, pricing structure and billing system would influence customer satisfaction positively which also have a significant positive impact on customer loyalty. The study has shown that the network quality dimension such as the clarity of voice and the coverage was found to have a significant positive effect on loyalty but
not on customer satisfaction. It was also confirmed the mediation role of customer satisfaction on the service quality and customer loyalty relationship. The telecom service market being the matured service market, the service providers would devise and implement strategies to retain their existing profitable customers by improving customer satisfaction, service quality and customer loyalty.

2.3.3 Corporate image

Nguyen and Leblanc\textsuperscript{12,13} (1998; 2001) have revealed that image was the customer’s perceptions of the image of the service firm and was related to the physical and behavioural attributes of the firm, such as business name, architecture, variety of products/services and to the impression of quality communicated by each person interacting with the firm’s clients. It was asserted that a good corporate image or reputation would help to increase the firm’s sales and its market share. It was found that the customers receiving higher level of service quality would form a favorable image of the firm resulting into higher customer loyalty. The result of the study also indicated that the satisfaction and service quality were positively related to value and value was found to positively impact on image and the firm should have a strong image when customers believe they were getting high value.

Johnson, Gustafsson and Andreassen\textsuperscript{14} (2001) have revealed that corporate image might be affected by the customers recent experience and expectations and it would be the outcome of customer satisfaction and the consistency of customers experience over time would reflect and enhance the corporate image of the firm.
2.5 Marketing technique

According to Grover, Srivastava and Sunil Kumar (2006), marketing process include the following:

- To discover the need of the customer regarding the preferred product.
- Provide appropriate features and quality for the product
- Pricing the product correctly.
- Promote and make customer aware of the product.
- Sell and deliver the product.

According to Labh Singh and Chawla (2012), BSNL has launched many a sale promotion schemes to improve its market position. Some of the efforts of BSNL to tide over competition as given by the author are like

- Appointment of franchisee for sale and distribution of services and products and fixing of targets for sale.
- Offering of incentives such as commission.
- Offer sale incentives matching with other operators.
- Commission on achieving the targets.

Customer care services like Personal attention to corporate customers, improving the quality of response at call centres, opening of more customer service centres (CSCs) with round the clock (24x7) service, availability of total information at single point etc. are some of the initiatives to improve customer satisfaction. As per the author sale promotion activities by BSNL has been overhauled by launching numerous promotional schemes and incentive. The concept of dealers and distributors as channel partners has been introduced. Concept of Single window service has been introduced.
As per BSNL digital library notes and publication downloaded from web (2011) BSNL has increased its marketing strategies through devising various projects called project-smile, project-shikhar etc. Project smile is for improving customer satisfaction through management of Customer service centre (CSC) from a sales and customer service perceptive. This project is called project smile Customer service (CSC) centre initiatives. Customer satisfaction and service window as per customer convenience is ensured through project smile. Sales and promotion policy has been devised to restructure channel and distribution management. Innovative pricing, special promotional schemes, advertising, branding and publicity are some of the marketing strategy existing in BSNL. Product innovation, customer segmentation, technology road mapping, customer processes, sales and distribution, service delivery and up to date product reach at point-of-sales, network and performance management etc. are some of the steps the BSNL took towards enhancing marketing strategies.

According to Sangeeth Varghese (2007), Reliance Infocom undertaken many creative ways and challenged the conventional practices in product design, distribution, sales, advertising and pricing. It has introduced new innovative pricing system like “Dhirubhai Ambani Pioneer Offer”, “Monsoon Hungama Scheme” etc. Market consolidation was effected through pre-paid offering and ensured minimum capital cost strategies through the implementation of hard core negotiations with vendors to ensure rock bottom prices. Sales strategy like discounts for employees and their referral connections, discounts for shareholders and their referral connection, ensuring availability of products in grocery stores, gas stations, music stores, departmental stores, street side vendors, bookshops, hotels and restaurants, Reliance Infocomm owned retail outlets
etc. were implemented. Advertisement strategy like bundling of handsets with service, Reliance Infocomm branded mobile phone instruments, advertisements based on Bollywood movies and cricket were introduced. According to the author, the important marketing strategy that Reliance Infocomm resorted to was the clear differentiation of the product by relying on data applications in addition to voice through “RWorld”. Innovated product strategies like RWorld, Rconnect, Wireless Point of Sales, Tie ups with major banks etc. Customer service strategies like centralised service, 24 by 7 service, service offerings in 10 languages etc. were made.

Su-Yeon Kim9 et al. (2006) have proposed a framework for analyzing customer value and segmenting customers based on their value and suggested marketing strategies according to customer segment in respect of a wireless telecommunication company. The authors have evaluated the customer value from three viewpoints namely, current value, potential value and customer loyalty and segmented the customer base with the three viewpoints and segment analysis was performed according to the segmentation results. Current value is the average amount of service charge to be paid by the customer, minus the average charge in arrears with him for six months period and Potential value is the probable amount expected from a certain customer when he uses the additional services. Customer loyalty can be a measure of customer retention. It was concluded with the suggestion of five possible marketing strategies depending on the segment of customers as given below.

1. Strategy to charge membership fee.
2. Strategy to upgrade a phone device.
3. Strategy to attract customers belonged to particular ages and occupations.
4. Strategy to provide better services for loyal customers
5. Strategy to strengthen a brand image

Sang-Gun Lee\textsuperscript{95} et al., (2011) developed a model which demonstrated the customer immigration behaviour in cellular service market of South Korea with innovation and imitation parameters. The study identified the innovation effect of a new product in the saturated and competitive market. Those who do not have market power could adopt innovative products and others who do have market power could focus on technological innovation of their products in order to prevent their customers from migrating to another service provider.

Marianna Sigala\textsuperscript{96} (2006) suggested that service providers of mobile phone services should use the customer value based mass customisation strategy for improving the effectiveness of the new service development processes; marketing and promotion; and customers’ training on the use of mobile phone services.

N.P. Singh\textsuperscript{97} (2010) has revealed that Mobile Network operators (MNO) are those who operates their telecom network and services where as Mobile Virtual Network Operators (MVNO) are switchless resellers who provides services like Discounted Services, Community Services, Mobile Network Operator Emulation, Premium Value Added Services, Fixed to Mobile Convergence, Advertising and Loyalty, Enterprise, Location Based Service (LBS), and Telematics. MVNOs are either prohibited or at a nascent stage of development in developing countries like China, India etc where all services are controlled and provided by
Mobile Network operators (MNO). The number of global MVNO subscribers would touch 85.6 million in 2015 in comparison to 52.6 million in 2009 and it would grow at a Compound Annual Growth Rate (CAGR) of 8.5% during 2009 to 2015. The bulk of that growth would come from Western Europe, the US, Australia etc. and the growth might increase as the developing countries like India too in the process of launching MVNO operations. Those MVNOs have to buy minutes in wholesale from MNOs to provide services like issuing their own branded SIMs, Billing and invoicing, special value added services such as Call Me Back, Credit Warning, Credit Transfer, Credit in Advance and Tariff plan.

Iacob Cătoiu Daniel Adrian Gârdan (2010) studied the consumer perception towards mobile marketing campaigns and revealed that Advertising on mobile phones became very important as service providers could offer new opportunities for implementing marketing communication strategies as interactions between consumer and advertiser could be easy. It was observed that taking into consideration the new facilities and features available in mobile smart phones and mobile communication technologies, access over the internet and web browsing became versatile and simple and promoting a brand over mobile internet could be effective than using simple SMS or MMS service. The study has found that consumers had negative attitudes towards mobile advertising as they had not given specific consent to it and both permission-based and incentive-based advertising mechanisms were feasible for mobile advertising because it could be possible to identify individual users using the wireless technology. The awareness and usage level of the customers were very low regarding the emergence of new technologies like GPRS, EDGE, WCDMA, HSPA (High Speed Packet Access) and LTE (Long Term Evolution) which could facilitate them to browse the Internet or send e-mails, send and receive
video or music, use more demanding applications like interactive TV, mobile video blogging, advanced games or professional services. The study concluded that the non awareness and usage of smart phones and advanced technology made lack of interest regarding mobile advertising in them and mobile service providers were not perceived as reliable partners in the satisfaction equation of the consumers which could lead to a kind of resistance in front of mobile promotional efforts.
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