

Chapter 7

Summary and Concluding Remarks

7.1 Summary

The present chapter is based on the field work carried out in Vadodara district during the year 2005. Selected samples of 1,250 respondents were interviewed and the primary data for the study was collected. The sample of 1,250 respondents was selected by following random sampling method.

In the forgoing chapters we examined the role played by mobile phone services in day-to-day life of the consumers in Vadodara district. In this chapter the main findings of the study along with the concluding remarks are highlighted.

Chapter 2 analyzes various concepts of the consumer behavior and the studies related to consumer behavior in relation to usage pattern of various products and services done by scholars. The interdisciplinary richness of the field of consumer behavior is studied. Here, the fundamentals for critical thinking in the area of consumer behavior are emphasized. Communication technology has enabled consumers to become more aware of things and hence, more options are available in the market. This has made the marketers to undertake a broader view on individual consumption behavior.

This chapter analyzes the various models applied to consumer behavior (traditional, experimental, and behavioral). The concept and factors affecting consumer behavior (individual and environmental) are also studied. Basic models of consumer behavior will always be the same, irrespective of the market environment and growth. Individual behavior can be analyzed and studied but the collective behavior of the consumers should be considered with the basic guidelines, as specified in the present chapter. This chapter found that consumer is affected by both economic and non-economic factors. In the present study also these factors are also taken into consideration.

Consumer behavior irrespective of the stream emphasizes only the importance of individuals' actions. Therefore factors affecting the consumer behavior are to be studied thoroughly by the marketers.

Chapter 3 highlights the growth of telecommunication sector in a country during pre and post economic reform. While most countries in 1980s, adopted the cheaper wireless mobile phone technology and grew their tele-densities and economies. Deregulation of Indian telecommunication sector shows how infrastructure can be brought to global standards.

In the post liberalization era, there has been a surge in telephone connections in India. Telecommunication sector has been struggling in the name of security. A basic reason for the improvement in telecommunication quality is when the national government realized that a reliable telecommunication infrastructure is essential for socio-economic development. Till this date i.e. sixth five year plan period, only 2.26 percent of total outlay was allocated to the communication sector whereas today, telecom sector has around 5.5 percent of total outlay of the national plan (tenth five year plan period).

The economic reforms initiated in 1990's, through an invitation to the private service providers, resulted in the growth of the industry. Pitroda, S., father of the development of the Indian telecommunication sector started with many more like minded future seekers and as a result, today telecommunications is a do or die situation. DOT took the initiative to increase the growth of the sector by various telecommunications policies. Achievements of the excellent telecommunications services as per the world standard are the result of NTP 94, NTP 99, CCB 2001, and TRAI.

With the objective of telecommunication for all and within the reach of all, NTP 94 was implemented. Till this period, telecommunication services were considered as luxury goods, beyond the affordability of common man. Further a PCO for every 500 population in urban areas and availability of world class VAS was targeted. As a result of such high target plan objective were set. Urban penetration of 1 PCO per 522 persons, besides the coverage of around 3.1 lakhs villages out of total 6 lakhs was achieved.

Further to fulfill the other objectives, NTP 99 was introduced and the new targets were set, much higher than that of NTP 94. Telecommunication services within the reach of all citizens along with the affordability were set as a major goal. Availability of telephone on demand by 2002 and there after resulting in tele-density of 7 by the year 2005 and 15 by the year 2010 was set as one of the specific target.

CCB 2001 was introduced, suggesting new rules and regulations of the game. CCB 2001 emphasized on the role of regulatory authority. TRAI 1997 came into existence with the mission to create and nurture conditions for the growth of the sector. Till date, TRAI 1997 is playing its role effectively. It works for the benefit of consumers and only consumers. Today, to maintain the telecommunication sector with transparent rules and regulation beside the QOS objective, new TRAI 2000 operates.

In 1992, GOI announced the intention to award mobile phone service license to private service providers and as a result, tender documents were issued and the new era in the Indian telecommunication started with the introduction of mobile phone services. Initially mobile phone services were introduced in metropolitan cities and the activation charges were set up as Rs. 1,200 along with the monthly charges of Rs. 156 and refundable security deposit of Rs. 3,000. RPP was applicable and the call charges were set up as Rs. 4.20 – Rs. 8.40 – Rs. 16.80 (per minute airtime charges) with the successful start of services in metropolitan cities, government decided to introduced mobile phone services all over the country. Nation was bifurcated in 23 circles, on the basis of population, area, and the share in the economic development. Again tender were issued and the bidding process took place. This time rules of the game were different from the first bidding, as per the experience. License fees were set along with the limitations of only two mobile phone service providers in one area.

To enhance the completion and development process, public sector service provider also started their mobile phone services during 2003. As a result of the introduction of third mobile phone service provider, competition in the telecommunication sector not only increased but the calling rates started falling. To add fuel to the fire, in 2002 licenses were issued for the fourth mobile phone service provider. Acceptance of new technology along with the declining tariffs and whole hearted acceptance of government resulted in the tremendous growth of the mobile phone services.

New rules and regulations along with the relaxation in the license fees and the selection of technology for operators resulted in the development of the telecommunications sector. Currently GSM and CDMA technologies are available in the market and cut throat competition among service providers occurs. Telecommunication sector is benefited with the introduction of private service providers. Revenue of the public service provider for mobile phone services in Rs. 7,173 crore, whereas same for the year private service

provider is Rs. 28,706 crore. Not only the number of consumer opting for mobile phone services is more when compared to fixed landline phone connection but also in terms of revenue, mobile phone services are now ahead of fixed landline phone services.

CPP was introduced in 2003 and also the declining call charges of mobile phone services resulted in the outgoing call charges as low as Rs. 1.20 per minute (September 2005). New addition of consumers in a month set a mark in 2006. ARPU and MOU figures also talks about the acceptance of mobile phone services in the nation. Total 8 percent of the countries population owes the mobile phones (January 2006), and the target set by the government is to achieve 200 million mobile phone consumers by BSNL, till 2007.

Availability of services i.e. pre-paid and post-paid also made the acceptance of telecommunication services. 124 percent is the growth rate of post-paid mobile phone consumers whereas for pre-paid consumers it is 168 percent, for the year 2004.

Mobile phone tele-density rate is the 4.83 percent and that of fixed landline phone is 4.25 percent (2005). Number of mobile phones in India in 2006 is 92.52 million whereas number of fixed landline phone is 49.57. All this growth in mobile phone services is the result of individual growth of telecommunication services among all the states of the country. For Gujarat state tele-density for the year 2006 stands as 2.69 percent. Gujarat state has crossed the mark of 1 million users in the year 2006.six mobile phone service providers are operating in the state.

Today telecommunication is a central part of people's lives. It is the fastest growing sector with the huge investment opportunities. Society is always in the process of change and the pace of change is becoming more rapid every day. Communication environment contributes to quality of life, to social, political, and security objectives with the ability to improve the scope and efficiency of business operations.

A more competitive market structure is possible, but it requires a very different approach to the present one where, the government licenses operators and the regulator fitfully interferes in the tariffs. Thus Indian mobile phone market has made its own identity around the world but still it has to achieve toe quality level and the increasing competition and continuous support of the government is the only solution for the future development.

Chapter 4 highlights the studies on the mobile phone usage pattern made all over the world, done by various scholars. Such studies lay the foundation for the present study. Mobile phone study encourages exploration of world beyond local boundaries. First few studies emphasized on the age of mobile phone users. All over the world the age of possessing mobile phone is declining day-by-day. Beside age, another important demographic factor studied by many scholars is gender. Gender variation among teenagers and adults is emphasized here. Usage of various mobile phone services varies with these demographic factors. SMS is the highly acceptable mobile phone service by all mobile phone users irrespective of demographic factors. Besides SMS, usages of other mobile phone services are also studied. Cross-country variation in mobile phone usage pattern shows that, everyone and everywhere had accepted this technological gizmo, though the variation among acceptance and usage pattern occurs. Comparisons of mobile phone services along with other modern technological gadget are also studied beside the acceptance of the mobile phone services in business sector. Mobile phone advertising is also studied and the consumers have a similar opinion about the service. Overall satisfaction of mobile phone services is also studied by the scholars and the results of the same are varying from region to region. Acceptance of fixed landline phone and mobile phone services as complementary or substitute goods are discussed along with the FMC. Therefore it is seen from the various studies done by scholars in relation to gender, income, and age etc., there is a relation among these factors. Studies all around the world highlight the importance and acceptance of the mobile phone services.

Geographical perspectives of five talukas namely Dabhoi, Padra, Savali, Vaghodia and Vadodara are discussed here. Except Vaghodia taluka, other four study areas are well developed and therefore transportation facility was easily available. Reason for studying these areas is the availability of mobile phone service providers in the region. Almost all mobile phone service providers network is available in these talukas of Vadodara district, with large number of retail outlets providing recharge coupons and new connection facility.

According to Lok Sabha unstarred question No. 3267, dated March 23, 2005, district wise funds allocated for telecommunication services for Vadodara district of Gujarat state in the year 2001-2002, 2002-2003, 2003-2004, and 2004-2005 are 87.4 crore, 38.01 crore, 30.57 crore, and 12.79 crore respectively. In the year 2001-2002 in terms of funds allocation,

Vadodara district was on sixth rank and in 2002-2003 it was on thirteenth rank. During the year 2003-2004 and 2004-2005 Vadodara district ranked as fourth.

This chapter also discussed the socio-economic factors in general and of the respondents in particular. It makes the picture of mobile phone consumers in Vadodara district. Inverse relationship among all the factors of composition of households (number of members in a family, composition of household, number of mobile phone users in a family etc.) exists. This upward sloping trend is related among all the factors. If there are less number of members in a family their will be less earning members and few mobile phone users in it. These figures are an indicator of the growing nature of the market and also the pointer to the fact that there lies a big opportunity for all the mobile phone service providers.

Mobile phone market is at a boom all over the world. Study of the socio-economic conditions of the consumers in the present chapter; emphasize the mobile phone usage pattern in Vadodara district. Study of mobile phone consumers and their socio-economic factors shows an inverse relationship between increase in the number of respondents and the socio-economic variables (number of members in a family, number of mobile phone consumers in a family, number of earning members in a family, age, gender, marital status, occupation of the respondents, family income, possession of fixed landline phone connection, two wheelers, four wheelers, computer, C.D. player, television, and house). Both rural and urban talukas of Vadodara district follows the same trend. Similar pattern exists for all the variables of composition of household, demographic factors, and the standard of living. Education is the only demographic factor showing a variation among itself in rural talukas. As the maximum numbers of respondents are from urban area of Vadodara district, still the same trend is followed by rural areas. Final household profile of the consumers will help in analyzing the diverse impact of mobile phones in their day-to-day life.

Presence of Gender variation among mobile phone users along with the mobile phone usage pattern among teenagers is also highlighted here. Features that influence young mobile phone consumers are emphasized and studied separately. Demand and usage of fixed landline phone connection, beside the role and acceptance of FMC in future are also emphasized. Trend of acceptance of mobile phone services and each and every socio-economic factor of the consumers emphasizes a unique relationship in both the rural and urban areas.

In chapter 5, an attempt is made to highlight the behavior of the mobile phone consumers and their preferences toward the mobile phone usage pattern. Various socio-economic factors like age, educational qualification, and the possession of the fixed landline phone connection of the respondents are studied separately. In order to examine the relation to mobile phone services usage pattern statistical and econometric models are made use of.

An attempt is made to analyze the relation between young mobile phone consumers in Vadodara district and their mobile phone VAS usage pattern. And for the same LPM is made use of. The study found out that the consumers in Vadodara district are well aware of various mobile phone services (SMS, Roaming, GPRS etc.). The analyses shows that the probability of awareness irrespective of age is very high in case of SMS (99 percent) and roaming facilities (92 percent) whereas, it is relatively lower in case of video application, GPRS, and infrared. For the CUG facility, the probability of awareness is 80 percent. Basic reason for the development of the VAS market is that mobile phone consumers are not satisfied only with voice. They are looking for more and more intelligence, comfortable, individual, and entertainment services, which only VAS can provide. All the mobile phone service providers are focusing on providing better VAS services to its consumers and thus increasing the competition in the market.

The standard of living variables (possession of assets) in relation to possession to fixed landline phone connection are analyzed. For analyzing the aspect, regression technique is made use of. It is found from the analysis that the assets under study have some positive effect on the possession of fixed landline phone connection. The analysis found the importance of possession of fixed landline phone in Vadodara district in relation to the components of family structure and assets.

Regression coefficient for marital status and number of earning members in a family shows the negative impact of both these variables on the consumers owning fixed landline phone connection ($b_1 < 0$). All other coefficient values are positive which shows positive impact of these variables on the possession of fixed landline phone connection. The result shows that the increase in possession of all goods will also result in increase in owning of fixed landline phone connection. Total number of members in a family and the number of mobile phone users in a family have positive impact on fixed landline phone connection. It is interesting to note that with the increase in the number of earning members in the family, the probability of fixed landline phone connection goes on falling. The educational

qualification of the respondent, marital status, possession of four wheelers, computer, C. D. Player, house and television are affecting positively the possibility of possession of fixed landline phone connection.

The possession of fixed landline phone connection in Vadodara district in relation to the components of family structure and assets highlights the importance of fixed landline phone besides the availability of mobile phone services. Purpose of getting fixed landline phone connection is to be in contact and to have some common contact number in a family where all the members can be traced out collectively and also individually, will never let down the growth of fixed landline phone market in Vadodara district. It will not just flourish but its demand will increase with time without having any impact on growth of the mobile phone market. One can easily consider the importance of fixed landline phone besides the availability of mobile phones.

An attempt is made to analyze the difference between usage of mobile phone connection in relation to playing games, requesting news updates and participating in quiz competitions. Also opinion about different variables like - accepting mobile phone as status symbol, considering mobile phones as a necessity for daily life, influence of mobile phones on health of the user, ban on using camera phones in public place and also its usage in schools and collages is also studied. On the basis of response of 1,250 respondents', educational level is studied in not less than seven different categories.

Out of total 1,250 respondents, 924 respondents (73.92 percent) believe that the mobile phone is a necessary article in their daily life. But out of total seven respondents having less than SSC studies only one respondent believes it as a necessity and all others consider it as luxury. Only 10.96 percent of the respondents having graduation as educational qualification believe mobile phones as a necessity article in their life.

The maximum number of respondents in the age group of 11 years to 30 years reported that mobile phone usage should be banned in schools and collages. Out of 1,250 respondents only 853 respondents (68.24 percent) had given negative response. Maximum variation in relation to prohibition on mobile phone usage pattern is among the graduates.

With reference to banning of camera phone usage, respondents shows an opposite results as compared to early results of ban on mobile phone usage in schools and collages. Out of

total number of respondents, 67.04 percent of the respondents positively agree on prohibiting the usage of mobile phones with camera in public place, highest percentage of positive result as compared to all other statements discussed earlier. Out of total respondents with less than SSC, SSC, HSC, Diploma, Graduate, Post Graduate, Professional, and Under Graduate as educational qualification 5, 34, 43, 31, 356, 124, 77, and 168 respondents respectively reported that the usage of camera phones should be banned in public places.

In relation with the Number of respondents playing games on mobile phones is 59.52 percent, constituting 744 respondents out of total 1250 respondents. Maximum percentage of respondents preferring playing games on mobile phones has SSC as educational qualification (33 respondents (73.33 percent) out of total 45 respondents, followed by professional degree holders (68.25 percent) respectively. Only 99 respondents (44.49 percent) out of total 221 respondents with under graduate degree always play games on mobile phone.

The detail broadcast report of information about recent event i.e. news update on mobile phones is available for the consumers. 30.15 percent of the respondents with professional degree, demands always for current events updates (30.15 percent) followed by those having post graduation as educational qualification (28.92 percent) and then by diploma holders (27.08 percent). Minimum demand is from the respondents having SSC as educational qualification (2.22 percent). Out of total 1250 respondents, 227 respondents are always using this facility. This trend emphasis that more educated a consumer is more frequent users they are for paid services. But only those consumers having passion or in some or the other way this information can help them in earning their livings, demands for the same. Some of the important news demand includes: politics, astrology, sports, entertainment etc.

Another important paid service facility available for mobile phone consumers is to participate in quiz competitions and contests. Respondents with educational qualification less than SSC taking part in such services are 14.28 percent. While only 6.37 percent of the respondents with graduation degree get involved in mobile phone quiz competitions. None of the respondents with SSC as educational qualification avail this facility. Generally people participate in such quiz competitions out of curiosity, to test their luck. As the participants have to pay premium charges to be a part of this service, only few

people are interested in it. Not only the mobile phone service providers but also other service providers in collaboration with other media facilities are organizing such events.

Scholars all over the world have undertaken various studies in relation to mobile phone market. But only few studies have been done on consumer behavior in relation to paid services. In the present study area, all the paid mobile phone services: games, news updates, and quiz participation, are related to educational qualification of the mobile phone consumers, in one or the other way affecting their service consumption behavior. Currently mobile phone games are in demand but the other paid services are still in need of proper exposure and thus in near future all the paid mobile phone services will have equal opportunities of development. Educational qualification in relation to mobile phone services stands as hedonism rather than utilitarian activity. It is found from the analysis that all the variables, which affect the usage of mobile phone paid services among consumers, are important. The result shows that the consumers of Vadodara district are not frequent users of the paid services.

The pace of consumer adoption of mobile phones in relation with fixed landline phone connection is studied. Basic criterion for selecting a respondent is the possession of at least one mobile phone at the time of the survey. Therefore, all 1,250 respondents possess mobile phones. But the possession of fixed landline phone was an optional. Out of total 1,250 respondents, 980 respondents (78.40 percent) possess fixed landline phone connection at their premises. In Padra taluka 89.17 percent (107 respondents) of the respondents had fixed landline phone connection whereas, in Savali taluka only 59.66 percent (71 respondents) of the respondents possess the same. In Vadodara urban region 79.81 percent (680 respondents) of the respondents possesses fixed landline phone connection.

To analyze the acceptance of telecommunication services, number of members in a family and number of mobile phone users in a family are also taken into consideration. Monthly rents of mobile phones as specified by the respondents are highlighted here. Maximum number of the respondents in all the talukas irrespective of the region has their monthly bill between Rs. 300 to Rs. 500. As 72 percent of the respondents are possessing pre-paid mobile phone connection and therefore, only recharge of more than Rs. 350 irrespective of the mobile phone service provider, has to be spend for being in contact for a period of one month. 215 respondents have a monthly expenditure between Rs. 100 to Rs. 300. 92

respondents have monthly rent of Rs. 1,100 and more whereas, only 22 respondents of Vadodara taluka has monthly expenditure between Rs. 700 to Rs. 900. None of the respondents in Savali and Vaghodia taluka has an expenditure of Rs. 700 to Rs. 900 on mobile phone in a month, but 5 respondents of both these talukas has monthly expenditure of Rs. 900 and more. Out of 1,250 respondents, 105 respondents pay a monthly bill of Rs. 1,100 and more.

The number of mobile phone users in a family and the number of members in a family shows the lack of relationship with the dependent variable of the model. Number of consumers possessing fixed landline phone connection has positive and strong association with the monthly rent of the mobile phone services. Regression coefficient of the number of mobile phone users in a family shows a negative sign, indicating the inverse relationship between the monthly rents of the mobile phones paid by a family. As the number of mobile phone users in a family increases, monthly rent of mobile phone also increases. Number of members in a family and the number of consumers possessing fixed landline phone connection have positive and strong association with the dependent variables (monthly rent of the mobile phone). Indicating the increase in the value of independent variables will further result in an increase in the value dependent variable also.

Telecommunication services have made a room in every day life of the residents of Vadodara district in the same manner as in the other parts of the world. As per the analysis, fixed landline phone and mobile phone connection are complementary and competitive to each other. It is also found that mobile phone services are the substitute to fixed landline phone connection. Purpose of getting fixed landline phone connection is to be in contact and to have some common contact number in a family where all the members can be traced out collectively and also individually, will never let down the growth of fixed landline phone market in Vadodara district. It will not just flourish but its demand will increase with time without having any impact on growth of the mobile phone market.

Chapter 6 highlights the success story of the major players of the sector and their contribution to market progress and various services offered from time to time. Six major players of Indian mobile phone sector namely - Bharti Airtel Limited, BSNL, Hutch, Idea Cellular Limited, Reliance Infocom, and Tata Indicom are providing services in the state.

Their objectives, market share, different services offered by them along with their current financial position.

Idea Cellular is the mobile phone service provider with minimum number of operating circle i.e. 11 whereas Airtel operates in all 23 circles in the nation. Maximum numbers of retailers 2,55,000+ are with Reliance Infocom. Three out of six mobile phone service providers are serving with both GSM and CDMA technology whereas the other three are serving with only GSM technology. Hutch is the only mobile phone service provider whose coverage in terms of number of cities/towns is not available. Number of consumers for the year 2005-2006, for Airtel, BSNL, Hutch, Idea Cellular, Reliance Infocom, and Tata Indicom are 19.58, 18.45, 15.36, 7.37, 17.31, and 4.85 million respectively. Within the state, Airtel has maximum market share of 21.5 percent followed by BSNL (20.3 percent) and Reliance Infocom (19.0).maximum revenue is also with Airtel i.e. of 7,928 million and the minimum is that of Tata Indicom i.e. 1,878 million.

Various marketing strategies adapted by the mobile phone service providers are taken into consideration. The study found that mobile phone service providers are adapting various marketing strategies to attract consumers. Impacts of these strategies on consumers, in relation to use of the services are scrutinized. To analyze the marketing strategy important variables such as price, product segmentation and market segmentation are used.

The finding of the chapter is that the mobile phone service providers use various strategies for marketing their products such as advertisement, sales promotion and other means, are not affecting the choice of consumers to a great extent. The price strategy of the service provider is the basic variable, which determines the subscribers in the market. Various tariff plans available in market during last one year are studied. All six mobile phone service providers are available in Vadodara district and no firm data in relation to district is available and therefore state level service offerings of mobile phone service providers has to be measured.

The pricing strategy of the mobile phone service providers with the tariff offerings for both the services, pre-paid and post-paid can be studied separately. As it is very difficult to make the figures comparable, the information is not analyzed by any model. The most upcoming and accepted tariff plan for the pre-paid consumers is lifetime validity scheme is studied here. Tata Indicom was the first mobile phone service provider who opted for the

non-stop mobile (lifetime validity scheme) on October 14, 2005. The easy recharge coupon of value up to Rs. 500 by all the mobile phone service providers, along with the processing fees of the service is studied.

In relation with the promotional strategies opted by the mobile phone service providers, In Indian advertising arena, mobile phone service providers are on the sixth position in using promotional strategy during first half of the year 2006, with 4 percent of market share. Only four advertisers in Indian market have used all sales promotional techniques in the specified period, three of the advertisers are the mobile phone service providers namely Reliance Infocom, BSNL, and Tata Teleservices.

An important promotional strategy adopted by all the mobile phone service providers is advertising. Most common way of advertising opted by the mobile phone service providers is the use of theme, memorable slogan. Such attractive and influencing theme by the mobile phone service providers helps the consumers to memorize the service provider at the time of buying. Slogans supports companies' current image by generating awareness, the most successfully communicated messages had a greater propensity to be unique.

For the first time, Airtel used Bollywood film stars, to promote telecommunication products, with the aim to break into the mass market and to double the existing base. The response of the advertisement was overwhelming, just as it was intended. Idea Cellular is the only mobile phone service provider not considering having a brand ambassador, they believe in local branding. Hutch believes in the more established connection between what consumers sees and what they experience and get gives more chances that the advertising campaign would be successful. Reliance explored the new and unconventional channels for advertising. The Reliance name embossed on every handset gave it a sole prestige, while the costs of many of the advertisements were discounted since they were also borne by the handset makers.

Mobile phone service providers are trying to use every media vehicle and channel effectively. The advertising campaigns had an emotional arena, assistance on cricket and bollywood thus, effectively connecting with every Indian. Advertising has become an effective way of educating masses and evoking passions. The fast growth of consumer base of mobile phone services reflects the impact of a powerful promotional strategy.

Product segmentation strategy started with the consent of TRAI in 1999, by allowing the mobile phone service providers to use any digital divide technology, including CDMA. Till this point, all mobile phone service providers have to use GSM 900 MHz, band based on TDMA. Thus now a days, Indian mobile phone service providers have an option to serve the consumers either with GSM or CDMA technology.

During the year 2004-2005, GSM technology service providers captured 78 percent of the total base of 52.37 million consumers, whereas the CDMA service providers occupy only 22 percent of the market share. Technology-wise consumer break-up of the market for the year 2005-2006 shows GSM contribution of 76 percent whereas CDMA contributes 24 percent. During March 2005, total number of CDMA mobile phone consumers was 11.31 million while in March 2006 the figure was 21.69 million. Whereas the GSM mobile phone consumers were 41.04 million in March 2005 and reached to 69.19 million in March 2006. In the financial year 2005-2006 total consumer base of mobile phone services is 90.88 million and 24 percent of this is captured by CDMA technology based service providers and the remaining by GSM service providers.

In the present study, out of total 1,250 respondents, only 252 respondents are using post-paid services. Number of pre-paid consumers for rural talukas is 347 respondents and for urban taluka are 651 respondents. Thus, the popularity and acceptance of pre-paid services in Vadodara district is more in comparison to that of post-paid services.

In relation to the pricing structure of pre-paid and post-paid services in Vadodara district, out of total 1,250 respondents, 254 respondents considers both the services at similar price level. 692 respondents consider pricing of pre-paid services high in relation to post-paid services while 313 respondents reported vice versa.

Mobile phone service providers in Gujarat are using the sales promotion techniques by making their services available to consumers through different offers in air. The highest number of plans for the pre-paid mobile phone consumers for the month of December 2006 was offered by Hutch (17 plans), followed by Bharti Airtel (7 plans). Reliance Infocom and Tata Indicom had four plans to offer to the consumers followed by BSNL with three plans. Idea Cellular had made the pre-paid services available under one name i.e. Chit Chat Card. During March 2007, Hutch and Bharti Airtel had 16 plans each to

offer to its pre-paid consumers, whereas the remaining four mobile phone service providers followed the same trend as in December 2006.

Until now, the high cost, poor connectivity and complexity of traditional regimes by authority kept mobile phone service providers far from capturing the revenue opportunities of managed security services. But with the acceptance of competition in the telecommunication sector, the authority removed all the hurdles in the growth path of the service providers. To grow in today's competitive marketing environment, mobile phone service providers must develop new business strategies that will enable them to claim a profitable share of the market. These strategies are not based on competitive pricing, but instead are focused on increasing and retaining a loyal consumer base, by delivering managed security services. Thus, new modern marketing concept applicable to the present scenario is not only to be developed but should also be followed by the telecommunication service providers.

To capture the market share, all the mobile phone service providers have to workout the proper and effective strategies. For mobile phone service providers, the service-based strategy is the key to success. Major marketing strategies are pricing, promotion, and product segmentation is discussed, from the service providers' as well as consumers point of view. All the mobile phone service providers are emphasizing on the consumer satisfaction. Mobile phone service providers in Gujarat are using the sales promotion techniques by making their services available to consumers through different offers in air. Mobile phone service providers are trying to use every media vehicle and channel effectively. Important promotional strategies adopted by all the mobile phone service providers are sales promotion and advertising. Preference towards mobile phone service provider and the service provider in use emphasizes the loyalty towards the service providers.

Market strategy opted by mobile phone service providers from the perspective of the consumers is studied here. Preference towards mobile phone service provider and the service provider in use emphasizes the loyalty towards the service providers. 376 respondents are using mobile phone services of Hutch while, 449 respondents preferred its services. Similarly 289 respondents are using services of Bharti Airtel while 451 respondents preferred its services. 134 respondents are using Idea Cellular mobile phone services whereas 149 respondents prefer to use the same. Number of satisfied consumers

increases the company's image and thus it is the case with Bharti Airtel, Idea Cellular, and Hutch, in Vadodara district. 117 respondents prefer BSNL whereas 344 respondents are using the same. Thus, out of total number of consumers opted for BSNL services 34 percent are non-satisfied consumers. Showing less trustworthy consumers for BSNL mobile phone services. Similar case as that of BSNL mobile phone services can be seen with CDMA mobile phone service providers. Total 107 respondents are using Reliance Infocom and Tata Indicom services but only 84 respondents have a liking for these services. Numbers of consumers using the services are non-satisfied and thus, they do not prefer the same.

Also the maximum numbers of respondents, irrespective of the region, are influenced by the overall presentation made by the mobile phone service providers. Out of total 1,250 respondents, 496 respondents (39.68 percent) are attracted by the presentation. Presentation refers to the action or way of presenting the facts. Another important feature that attracts the consumers is the music. 248 respondents (19.84 percent) get fascinated with the art of combining vocal and instrumental sound. 194 respondents and 172 respondents easily get attracted towards the brand statement and celebrity shown in the advertisement respectively. Only 142 respondents are not attracted towards any of the above mentioned features in the advertisement of the mobile phone service providers.

All the mobile phone service providers are emphasizing on the consumer satisfaction. One of the most common measure is the customer care facility. The number of consumers in four different categories i.e. dissatisfied, less satisfied, satisfied, and highly satisfied group. Further they are bifurcated on the basis of the region. Out of total 1,250 respondents, 905 respondents agree that their mobile phone service provider communicates with them. Though the communication means is SMS or a phone call. Out of these 905 respondents, 568 respondents are from Vadodara taluka only. Remaining 337 respondents are from the rural areas. All 10 respondents of Padra taluka, who owns Hutch mobile phone services, agree that the mobile phone service provider communicates with them. Whereas in Savali taluka, none of the respondent possessing Reliance Infocom (05 respondents) or Tata Indicom (01 respondents), agrees that the mobile phone service provider ever communicated with them. In relation to the time spent waiting for services, none of the respondent of Savali taluka are either dissatisfied or highly satisfied. All the consumers possessing Tata Indicom, irrespective of the region, are satisfied. For the

knowledge level of the executives, total 135 respondents are less satisfied. out of these 5 respondents are from Dabohi taluka, 17 respondents are from Padra taluka, 105 respondents are from Vadodara taluka, and 4 respondents are from Savali taluka and Vaghodia taluka respectively. Number of services offered by the mobile phone service providers in just one dial i.e. customer care number, maximum respondents are satisfied (872 respondents) followed by less satisfied respondents (172 respondents) and highly satisfied consumers (103 respondents).

Besides the consumers own preferences, opinions for the service providers marketing strategies, in relation to mobile phone services are also discussed. Government rules and regulations also play an important and effective means in today's competitive market environment. All the mobile phone service providers irrespective of the region have to follow these norms.

To protect the interest of both the telecommunication service providers and the consumers, till date 43 amendments have been made from time to time in TTO 1999. Beside the TTO 1999 orders, authority has issued consultation papers specifying the tariff plans and also the other rules and regulations to be followed by the telecommunication service providers.

7.2 Concluding Remarks

From the present study the following suggestions and policy recommendations are put forward

- Major problems we came across were the lack of willingness on the part of mobile phone service providers to reveal data. As a result, we have had to depend on fragmented data collected from different sources.
- State and central government need to take initiative to create proper infrastructure of telecommunication services as there are still many loop holes in the sector. There is enough evidence, which suggests that indeed the quality of telecommunication service is sub standard, and also the supply of it lags far behind the demand for it. An attempt should be made to reduce the traffic conjunction specifically during the peak hours.

- There is considerable scope for an improved methodological framework and also further work in the area can be done. We have analyzed the mobile phone services only for few consumers, in a specific area of Vadodara district; this could be extended to more respondents; and also for much wider area. This need to take into account the socio-economic profile of the geographical units, individually as well as collectively.
- State telecommunication department should implement various laws in the right earnest. Their implementation of rules and regulations, in a way, will lead to the easiness to consumers, in terms of tariffs and service selection. This will also make the service providers responsible towards the consumers and thus will ultimately increase the availability of data.
- Expansion of rural telecom infrastructure, as per the government regulations i.e. sharing of infrastructure by public and private mobile phone service providers. Roll-out of telecommunication services in villages will need a lot of program management and parallel investment. Further reduction in communication cost would result in the enhancement of India's competitive investment organization.

To conclude, this study should be taken as a preliminary effort to examine the potential for better managed telecommunication infrastructure service, particularly with reference to mobile phone services. It can be used as a step to further research, useful from the policy perspective.