CHAPTER 7
CONCLUSIONS AND RECOMMENDATIONS

7.1 PREVIEW OF CONCLUSIONS AND RECOMMENDATIONS CHAPTER

Based on the interpretations and discussions of results in the earlier chapter, this chapter draws interesting conclusions which then forms the basis for making recommendations to Indian Cellular Mobile Service Providers. This chapter also presents again the limitations of this thesis as also the scope for future research potential possibilities.

7.2 CONCLUSIONS FROM THESIS STUDY

1. The Indian Cellular mobile service industry, has above average perceived performance ratings (> 6 on a scale of 1 to 9) on Overall Service Quality (OSQ). However, since the score is far below the excellence level of 9, we conclude that the Indian cellular mobile service industry is not fully satisfying its customers.

2. The Indian cellular mobile service industry is scoring higher in terms of perceived performance ratings on Service Quality dimensions like Convenience, Tangibles, Reliability, Assurance, Value Added Services (> 6 ratings on a scale of 1 to 9) while the industry has lower ratings for dimensions such as Complaint Handling, Empathy, Responsiveness, Network Quality and Price Competitiveness (< 6 ratings on a scale of 1 to 9).

3. For the Indian customers – the most important Service Quality dimensions are Network Quality, Price Competitiveness, Reliability, Complaint Handling in that order followed in the 2nd tier by Responsiveness, Convenience, Value Added Services, lastly in the 3rd tier by Assurance, Tangibles and Empathy in that order.
4. Network Quality is nearly twice as important as Price Competitiveness (1.61 times) to Indian cellular mobile service customers.

5. From points 2 and 3 above, we conclude that the Indian cellular mobile service industry is scoring on dimensions less important to customers (where it is getting higher (>6 ratings on a scale of 1 to 9) like Convenience, Tangibles, Assurance, Value Added Services while on the four most important dimensions namely Network Quality, Price Competitiveness, Reliability and Complaint Handling which form the first tier in importance to customers, the industry is getting <6 ratings (on a scale of 1 to 9) except for Reliability where the Indian cellular mobile service industry is on the right track.

6. The Indian mobile cellular service industry, though is seeing above average Word of Mouth (WOM) and Repurchase Intentions (RI) (>4 on a scale of 1 to 7), it is way below maximum score of 7.

Price Increase Tolerance (PIT) is lower than average (<4 on a scale of 1 to 7) indicating price sensitivity is high.

Though Indian customers use Internal Response to Complaints (IRC) (5.40 on a scale of 1 to 7) quite effectively, their External Response to Complaints (ERC) is also high (4.36 on a scale of 1 to 7) and far from ideal and hence a cause of concern.

7. Indian Cellular mobile service customers have a number of switching cost barriers which will continue to exert influence on customers’ behavior (though the biggest barrier of all-number portability concerns is no longer existing as number portability has been allowed from November 2010). Factors exerting higher influence are the convenience/comfort of remaining with current service provider, followed by customers perceiving sameness of offerings, then time and effort involved in gathering information and then fear of new operator’s service not working.
It is important to note that learning, indifference (non-involvement), employees relationship, confusion, financial cost of switching and difficult formalities / process are lesser switching barriers.

8. The Service quality (SQ) dimensions positively and significantly contribute to Overall Service Quality (OSQ to the extent of nearly 55.8% indicating good explanation power. However, nearly 44 % is unexplained and leads to conclusion that there are additional factors that may be important in explaining Overall Service Quality (OSQ) perceptions.

9. Eight Service Quality (SQ) dimensions positively and significantly contribute to explaining variance in Overall Service Quality (OSQ). The biggest contributors to change in Overall service quality perceptions (as indicated by beta coefficients) are Price Competitiveness, Empathy, Network Quality, Responsiveness, Value Added Services, Convenience and Complaint Handling together, and lastly tangibles in that order.

10. Customers exhibit patterns of behavior- especially there is high positive association between Repurchase Intentions (RI) and Word of Mouth (WOM) and medium positive association between Repurchase Intentions (RI) and Price increase tolerance (PIT).

11. Positive correlations between Overall Service Quality (OSQ) and Word of Mouth (WOM) is average/close to midpoint.

Also correlations between Overall Service Quality (OSQ) and Repurchase Intentions (RI) is also positive and close to midpoint.

Correlations between Overall Service Quality (OSQ) and Price Increase Tolerance (PIT) is not very high, again indicating price sensitivity among Indian cellular mobile service customers.
So also association between Overall service quality (OSQ) and External Response to Complaints (ERC) and Internal Response to Complaints (IRC) is low.

12. Further analysis reveals that the Service Quality (SQ) factors explain 26.6% variance in Word of Mouth (WOM), 24.6% variance in Repurchase Intentions (RI) while explanation power for Price Increase Tolerance (PIT) (6.4%), External Response to Complaints (ERC) (3.1%), and Internal Response to Complaints (IRC) (5.3%) is low.

13. Of the Service Quality (SQ) dimensions, four dimensions of Complaint handling, Reliability, Network Quality and Responsiveness contributes to change in word of mouth (WOM) in that order (as indicated by beta coefficients).

The four Service Quality (SQ) dimensions of Network Quality, Empathy, Responsiveness, and Reliability contributes to change in Repurchase Intentions (RI) in that order.

The two Service Quality (SQ) dimensions of Complaint Handling and Network Quality contributes to change in Price Increase Tolerance (PIT).

Of the Service Quality (SQ) dimensions, three dimensions of Complaint Handling, Value Added services and reduced Responsiveness contributes to change in External Response to Complaints (ERC).

Of the Service Quality factors (SQ), two dimensions of Value Added Services and Network Quality contributes to change in Internal Response to Complaints (IRC).

The above analysis, leads to conclusion that, Indian Cellular Mobile Service Providers should concentrate on those Service Quality (SQ) dimensions mentioned above, depending on which Behavioral Intentions dimension is the desirable outcome/goal for the service providers.
14. There is a positive association between Overall Switching Costs on one hand and Repurchase Intentions (RI) and Price Increase Tolerance (PIT) on the other.

15. Stayers (those who have subscribed /used only one service provider to date) and Switchers (those who have subscribed /used more than one service provider to date) are not different on their Word of Mouth (WOM) behavior. However, Stayers do have higher Repurchase Intentions (RI) and Price Increase Tolerance (PIT).

16. Further analysis reveals that prior churn (number of service providers used/subscribed to date) does not affect Word of Mouth (WOM) but affects Repurchase Intentions (RI) and Price Increase Tolerance (PIT). In fact, clear patterns emerge showing that as the number of subscribers used increases from one (If number of churn is one, it is defined as Stayers) to two, three, four, the Repurchase Intentions (RI) and Price Increase Tolerance (PIT) decreases though the Repurchase Intentions (RI) and Price Increase Tolerance (PIT) increases slightly when the churn is higher than four service providers.

17. Larger the duration of relationship with a service provider, higher is the Word of Mouth (WOM) behavior, Repurchase Intentions (RI) and Price Increase Tolerance (PIT). Thus, there are clear advantages of customer retention as a policy v/s customer acquisition.

18. Referral customers do not seem to have any impact on any of the three behavioral dimensions of Word of Mouth (WOM), Repurchase Intentions (CR), Price Increase Tolerance (PIT).

19. Demographic analysis reveals that both Postpaid and Prepaid users exhibit similar churn behavior (while common perceptions is that churn is higher for Prepaid). However, as age increases from 20 to <30 years, 30 to <40 years and goes further, churn reduces.
Women churn lesser that men.

More educated the customer, higher is the churn.

Higher the average size of bill, higher is the churn.

Homemakers and Retired customers churn less (63% of Homemakers and 69.7% of Retired have subscribed to only one service provider to date followed by Service class (44%). Business class customers and Students have higher propensity to churn.

20. Reasons for switching are unhappiness with earlier service provider, attractive competitive offerings, friends/family, changing cities and corporate tie ups in that order.

Demographics analysis reveals that Prepaid users switch more for attractiveness of competitive offers, than due to unhappiness with earlier service provider, followed by corporate tie ups.

For > 40 years and above age group, it is unhappiness with service provider that is pre-potent reason for switching unlike for 15-40 years, where attractiveness of competitive offers is predominant reason for switching. Friends/family influence 15 to <20 years and >65 years group more.

There is no difference between men and women on reasons for switching.

More educated the customer, more is the switch due to attractiveness of competitive offerings than due to unhappiness with service providers.

Small bill size customers switch more due to attractive competitive offerings while as bill size increases, unhappiness is a bigger reason to switch.
7.3 RECOMMENDATIONS FROM THESIS STUDY

Based on the findings and conclusions there from, in this thesis study, following recommendations are made:

1. It is recommended that Indian Cellular mobile service providers should concentrate on improving their perceived performance ratings which at a mean score (average) of 6 is currently far below ideal/excellence level of 9 which indicates that customers are not truly satisfied completely.

2. The Indian cellular mobile service providers should concentrate especially on Service Quality (SQ) dimensions very important to Indian customers-namely Network Quality, Price Competitiveness, Reliability, Complaint Handling, which form the first tier of importance to customers and on which incidentally, the current ratings are even below 6, except for Reliability where the score is above 6. This should be followed by concentrating on improving ratings on dimensions in 2\textsuperscript{nd} tier namely Responsiveness, Convenience and Value Added Services and then the 3\textsuperscript{rd} tier dimensions of Assurance, Tangibles and Empathy should be considered.

3. Cellular mobile service providers should concentrate nearly twice as much (1.61 times) over Network Quality as over Price Competitiveness.

4. Since Word of Mouth (WOM) and Repurchase Intentions (RI) is though >4, is way below maximum level of 7, Indian cellular mobile service providers should use offensive marketing strategies to create Word of Mouth (WOM) and Repurchase Intentions (RI).

5. Since Price Increase Tolerance (PIT) is still lower at < 4, and it is firmly believed by this researcher that, this is due to performance ratings below excellence and failure on part of the providers in concentrating on Network Quality, once Network Quality is improved drastically, Price Increase Tolerance (PIT) will automatically increase.
6. The Indian cellular mobile service providers should increase the confidence of the customers to use the Internal Response to Complaints (IRC) so completely (which currently is fairly effective but not completely) that they will automatically reduce their usage of External Response to Complaints (ERC).

7. Cellular mobile service providers should use this adapted Servqual scale (with eight Service quality (SQ) dimensions of Network Quality, Responsiveness, Empathy, Tangibles, Complaint Handling, Value Added Services, Convenience and Price Competitiveness) to evaluate Service Quality as these dimensions explain the variance to a large extent in Overall service quality perceptions.

8. Further studies should be done to understand what dimensions over and above these Service Quality (SQ) dimensions explain for the unexplained 44% of Overall Service Quality (OSQ) perceptions.

9. Eight Service quality dimensions contributing to change in Overall Service quality (OSQ) perceptions – Price Competitiveness, Empathy, Network Quality, Responsiveness, Value Added Services, Convenience and Complaint Handling together and lastly tangibles in that order should be concentrated on.

10. Indian Cellular Mobile Service Providers should concentrate on Network Quality, Empathy, Responsiveness and Reliability to ensure better Repurchase Intentions (RI).

For Word of mouth (WOM), Indian Cellular Mobile Service Providers should concentrate on Complaint Handling, Reliability, Network Quality and Responsiveness.

The service providers should concentrate on Complaint handling and Network Quality for Price Increase Tolerance (PIT).

Complaint handling, Value Added Services and reduced Responsiveness will cause change in External Response to Complaints (ERC).
Increased Value Added Services and Network Quality performance ratings will ensure that customer will have increased confidence to use more of the Internal Response to Complaints (IR) mechanism.

11. Cellular service providers should have a segmental strategy identifying customers with higher switching costs as such customers have higher Repurchase Intentions (RI) and Price Increase Tolerance (PIT).

12. Cellular service providers should clearly have different strategies for Stayers and Switchers as, though Stayers do not help companies with more Word of Mouth (WOM), they are better customers due to their higher Repurchase Intentions (RI) and Price Increase Tolerance (PIT). Switchers on the other hand, need to be viewed with caution, as more the number of service providers used/subscribed to date i.e. more the churn, lesser the Repurchase Intentions (RI) and Price Increase Tolerance (PIT).

13. Long term relationship with customers should be the sought after strategy as clearly, longer the duration of relationship, higher is the Word of Mouth (WOM), Repurchase Intentions (RI) and Price Increase Tolerance (PIT). Hence, companies should concentrate on customer retention in a big way rather than on customer acquisition.

14. Since Referral switching does not have any effect on the behavioral intentions dimensions, Cellular service providers will not benefit from referral switching achieved through various offensive marketing strategies (e.g. friends & family plans, rewards, etc.).

15. Cellular service providers should concentrate on getting more women customers as they churn less than men and also go after older customers (30 to 40 years age group and 40 to 50 years and above age group, rather than 20 to 30 years or less than 20 year old customers) since as age increases, churn reduces.
Also, cellular service providers need to be extra careful in their dealings with educated customers and customers with bigger average size of bill per month, as churn is likely to be higher.

Since, type of service (prepaid or postpaid) does not affect churn, cellular service providers need not clamor for/spend energies on, converting Prepaid users to Postpaid (for fear of higher churn, though the cellular service providers may do so for other reasons.).

As Homemakers and Retired customers churn less, they are better customers followed by Service class customers, unlike Business class customers and Students who have higher propensity to churn. Hence, cellular mobile service providers should concentrate their energies accordingly.

16. As a strategy, it is better to go after older customers (>40 years) not just because they churn less (as stated earlier) but also because they do not switch unless they are unhappy with the service, unlike 15-40 years age group, who switch more due to attractive competitive offers.

While from point of view of churn stated earlier, Prepaid and Postpaid users have equal propensity to churn (switch), it is better to convert prepaid to postpaid, as Prepaid users are more likely to be attracted to competitive offers than Postpaid users.

Cellular service providers have to be careful about the educated customers because not just do they churn more (as stated earlier) but also because they tend to be attracted to competitive offerings more.

Bigger average bill size customers however tend to switch only if they are unhappy with service provider.

It is recommended that for the segments who churn more out of unhappiness, Service Quality and Customer Satisfaction needs to be paid more attention to so as to retain the current customers and prevent them from leaving the service provider company. For those segments who churn more out of
attractiveness of competitive offers, competitive analysis and superiority of offer and differentiation needs to be presented in communication strategy used to attract these segments of customers to the service provider company.

7.4 LIMITATIONS OF THIS THESIS STUDY

1) The study was conducted in Mumbai city only. A National level study would have indicated regional differences in perceptions of Overall Service Quality (OSQ), perceptions of the Service Quality (SQ) dimensions and impact on Behavioral Intentions dimensions (Word Of Mouth, Repurchase Intentions, Price Increase Tolerance, External and Internal Response to Complaints), differences in Switching Cost barriers besides differences in other variables and the interrelationships between the various factors/variables.

2) Since the study was conducted in Mumbai city only, it can be at the most termed as fairly representative of metros while rural customers perceptions, needs and behavior has been completely ignored in this study.

3) The study was cross sectional and carried out in months of Aug. 2010 to November 2010. Owing to the ever changing competitive scenario and dynamic nature of this industry, a longitudinal study would have revealed changes in perceptions of customers over time.

4) Since the study limited itself to effect of Overall Service Quality (OSQ), on Behavioral Intentions, it was able to explain for < 30% of Behavioral Intentions. Other variables such as product/service involvement, personality differences, cultural factors, competitive factors etc. which would add to further explanation of behavioral intentions, need to be studied.

5) The direct score format (where perceived performance rating score is directly arrived at), has been used in this study, instead of computed difference score format (where performance rating score and desired expectations score is separately taken and then the difference between the two is calculated). While
the computed difference score format is considered a richer format, from the point of view of diagnostic value of where the gaps lie (Parasuraman, Zeithaml and Berry, 1994), the direct score format (also considered a reliable and valid format by the authors) was chosen owing to the limitations of computed difference format of increased length which was found to be having low response in the pilot survey.

7.5 FUTURE RESEARCH POTENTIAL

1) Further studies can be conducted on an all India basis to map the regional differences in perceptions of Overall Service Quality (OSQ), perceptions of the Service Quality (SQ) dimensions and impact on Behavioral Intentions dimensions (Word Of Mouth, Repurchase Intentions, Price Increase Tolerance, External and Internal Response to Complaints) differences in Switching Cost barriers besides differences in other variables as also the interrelationships between the various factors /variables.

2) Research can be conducted in the rural areas of India to understand the Service Quality levels among rural customers as also their behavioral intentions, besides the differences in the other variables and the interrelationships. This is especially important as the rural markets are going to be the markets of the future (see Introduction Chapter) as the urban markets for cellular mobile services gets saturated.

3) Cross cultural studies across various countries will reveal cultural differences in perceptions of Service Quality (SQ) dimensions, Overall Service Quality (OSQ) and Behavioral Intentions dimensions (Word Of Mouth, Repurchase Intentions, Price Increase Tolerance, External and Internal Response to Complaints) and the interrelationships.

4) Since the industry is highly dynamic, ongoing research in this area should be conducted.
5) With number portability being introduced in November 2010, churn is likely to be higher. It will be interesting to conduct studies into actual switching behavior and map the pattern of switch between various service providers.

6) Company wise (service provider wise research) can be conducted which can be used to advise individual service providers on areas of improvement in individual Service Quality dimensions (SQ), Overall Service Quality (OSQ), as also Behavioral Intentions dimensions (Word Of Mouth, Repurchase Intentions, Price Increase Tolerance, External and Internal Response to Complaints) besides other variables.

7) A study using computed difference score format revealing Zone Of Tolerance (ZOT) i.e. difference between desired service expectations and adequate service expectations; Measure of Service Superiority (MSS) i.e. differences between perceived performance and desired expectations, Measure of Service Adequacy (MSA) i.e. differences between perceived performance and adequate expectations; will reveal a richer diagnostic picture.

8) It would be interesting to conduct research from the other end – i.e. understand what factors can contribute to explaining each of the behavioral Intentions dimensions – i.e. Word of Mouth, Repurchase Intentions, Price Increase Tolerance, External Response to Complaints and Internal Response to Complaints, completely (to the extent of 100%), as the current research was limited to explaining how the considered Service Quality dimensions only, help explain each of the behavioral Intentions dimensions, (where it was found that Service Quality has been only partly able to explain Behavioral Intentions to the extent of <30%).
7.6 CONCLUSIONS OF THE CHAPTER ON CONCLUSIONS AND RECOMMENDATIONS

This chapter presents main areas of conclusions which forms the basis of recommendations. In the course of the study limitations have been noticed and are presented. The researcher has also delineated areas for future potential research.