

Chapter Four

Findings And Discussions

4.1.Profile of the Respondents:

As mentioned in the 'Chapter 3', researcher had conducted survey of broadband users in Pune city, which consisted of '1020' respondents. Due to the constraints discussed in the section 3.6 of chapter 3, the researcher adopted 'convenience sampling' technique for the study. This chapter discusses the customer profile and findings of the study. The 'Gap Model' developed by the researcher also presented in this chapter.

To arrive at the findings, the data has been analyzed and represented in tabular form or graphical format wherever appropriate. For the Gap Model developed by the researcher, the SERVQUAL gap Model put forth by Parasuraman, Zeithaml and Berry (1985) is taken as a reference for this study.

1. Respondents Gender.

- Table 4.1 shows the classification of the respondents based on the gender. Of the total 1020 respondents, 68% (694) were males and 32% (326) females.
- Comparatively the percentage of the females was lower as compared to males. This is because during the survey it was observed that female respondents expressed their unwillingness to respond to questionnaire and avoided certain questions either because they were not aware or had to tax their memory to recollect the answers.
- As far marital status wise; 53.3% (544) were married, 32.6% (333) unmarried and rest of them 14% (143) were single.

2. Respondent's Occupation

- The highest percentage of the respondents when it came to their 'Occupation' was of 'Salaried' class (51.8%). The next higher percentage of the customers was from 'Students' and 'Professionals' class (20.4% and 11%). Whereas 'Self employed' and 'Home makers' were 9.2% and 5.3% respectively, homemakers represented the smallest class.
- Table represents 'profile of the respondents' based on demographic parameters.

Table 4.1

Profile of respondents

| Sr | Demographic Information | Parameter | Count | Table N % |
|----|---|------------------|-------|-----------|
| 1 | Gender | Male | 694 | 68.0% |
| | | Female | 326 | 32.0% |
| | | Total | 1020 | 100.0% |
| 2 | Marital status | Married | 544 | 53.3% |
| | | Unmarried | 333 | 32.6% |
| | | Single | 143 | 14.0% |
| | | Total | 1020 | 100.0% |
| 3 | Education | Up to SSC | 66 | 6.5% |
| | | Under Graduate | 174 | 17.1% |
| | | Graduate | 462 | 45.3% |
| | | Post Graduate | 318 | 31.2% |
| | | Total | 1020 | 100.0% |
| 4 | Occupation | Salaried | 528 | 51.8% |
| | | Student | 208 | 20.4% |
| | | Self Employed | 94 | 9.2% |
| | | Professional | 112 | 11.0% |
| | | Home maker | 54 | 5.3% |
| | | Others | 24 | 2.4% |
| | | Total | 1020 | 100.0% |
| 5 | Average house hold Income per month (In Rs) | Less than 10,000 | 80 | 7.8% |
| | | 10,000 to 20,000 | 245 | 24.0% |
| | | 20,000 to 40,000 | 364 | 35.7% |
| | | More than 40,000 | 331 | 32.5% |
| | | Total | 1020 | 100.0% |

3. Broadband Service Providers and Customer base:

- As per the survey, there were in all 10 BSP's which were providing broadband services to the people from Pune city.
- The surveyed statistics from Table 4.2 shows that the top five Broadband Service Providers from Pune were BSNL, TATA, Airtel, Reliance, and Vodafone; with over all broadband customer base of 31.7%, 15.5%, 14.5%, 13.5% and 8.8 % respectively. These top five BSP's contributed 84% of the total broadband customers and rest of the broadband service providers had total percentage share of customers of 16% only.
- The State owned company BSNL was leader with overall 31.7% of the total broadband customers whereas the private Broadband Service Providers having customer base of 68.3% of the total broadband users.

Table 4.2

Broadband Service Providers from Pune city and respective customer base.

| Sr. | Broadband Service Providers (BSP's) | No. of Subs. | Percent |
|-----|-------------------------------------|--------------|---------|
| 1 | BSNL | 323 | 31.7 |
| 2 | Tata | 158 | 15.5 |
| 3 | Airtel | 148 | 14.5 |
| 4 | Reliance | 138 | 13.5 |
| 5 | Vodafone | 90 | 8.8 |
| 6 | Sify | 23 | 2.3 |
| 7 | You Telecom | 17 | 1.7 |
| 8 | Hathway | 11 | 1.1 |
| 9 | Others | 112 | 11.0 |
| | Total | 1020 | 100.0 |

4. Use of broadband for specific purpose.

- As discussed earlier in the ‘section 2.10 of chapter 2’; the population of Pune consisted of various age groups and engaged in various occupations. This has relevance in their needs; usage of broadband services. The needs of the various individuals based on age, gender, educational qualifications are discussed in this section.
- It was found that 53.9% of the respondents were using broadband services for, ‘Searching and gathering information’ and 45.3% used it for ‘Office Work’.
- 29.9% of the total respondents use broadband for ‘Academic’ purpose and 42.5% were using it for ‘Entertainment’ purpose.

Table 4.3

The classification of respondents on the basis of use of broadband for specific purpose.

| Usage of Broadband for | Yes | |
|------------------------|-------|------|
| | Count | % |
| Office works | 462 | 45.3 |
| Academics | 305 | 29.9 |
| Information gathering | 550 | 53.9 |
| Entertainment | 434 | 42.5 |
| Business | 304 | 29.8 |

- Broadband is a widely accepted worldwide media for on line businesses and on line business related activities. It can be used conveniently for on line tendering, submitting quotations, marketing, advertising and on line banking transactions. The table 4.3 shows 29.8% of the broadband users use broadband for ‘business related activities’.

5. Use of broadband for office related work and Income.

- (Table 4.1); 68.2% of the total surveyed broadband respondents were having average family income '20K and above' and rest of the respondents (31.8%) were having average monthly income below 20K.
- It is seen from the Table 4.4; '20K to 40K' income category had the highest percentage of the respondents (38.7%), who were using broadband for 'office work', of all income categories. The next higher percentage of customers who were using broadband for same reason was from income group '40K and above' and their percentage was 37.2%.

Table 4.4

Usage of the broadband for 'Office work' and 'Average family monthly income' of the broadband customers.

| Usage of broadband For Office work | Average house hold Income per month (In Rs) | | | | | | | | Row Total | Row Total |
|---|---|------|---------------------|-------|---------------------|------|---------------------|------|--------------|--------------|
| | Less than 10,000 | | 10,000 to 20,000 | | 20,000 to 40,000 | | More than 40,000 | | | |
| | Count | % | Count | % | Count | % | Count | % | Count | % |
| Yes | 21 | 9.9% | 90 | 19.4% | 179 | 38.7 | 172 | 37.2 | 462 | 100 |

- There were 80 (7.84%) respondents, who belong to average monthly family income 'less than 10K'. Of these only 21 (26.25%) were using broadband for 'Office work'.

6. 'Occupation' of respondents and Use of broadband for 'Office work'

- Of the total respondents, there were 528 salaried broadband users; 183 (34.7%) belongs to average family income category '20K to 40K and 180 (34.7%) belong to average family monthly income '40K and above', and were using broadband for 'Office work'.

- There were 94 self employed broadband respondents; of which 63 (67%) belong to '20K to 40K' income category, were using broadband for 'office work'

Table 4.5

| Occupation | Average house hold Income per month (In Rs) | | | | | | | | Row Total | Row % |
|------------|---|------|------------------|-------|------------------|-------|------------------|-------|-----------|-------|
| | Less than 10,000 | | 10,000 to 20,000 | | 20,000 to 40,000 | | More than 40,000 | | | |
| | Count | % | Count | % | Count | % | Count | % | Count | % |
| Salaried | 37 | 7.0% | 128 | 24.2% | 183 | 34.7% | 180 | 34.1% | 528 | 100 |

7. Wire line and Wireless Customer Base for top five BSP's:

Following table 4.6 shows 'wire line' and 'wireless' broadband customer base for top five BSP's from Pune city.

Table 4.6

Wireless and wire line broadband customer base & Broadband Service Providers.

| BSPs | Wireless Customers | Wireless % | Wire line Customers | Wire line % | Total Customer Base | Total % |
|----------|--------------------|------------|---------------------|-------------|---------------------|---------|
| Airtel | 97 | 16 | 51 | 12.23 | 148 | 14.50 |
| BSNL | 87 | 14.42 | 236 | 56.59 | 323 | 31.66 |
| Tata | 105 | 17.41 | 53 | 12.7 | 158 | 15.40 |
| Reliance | 120 | 19.9 | 18 | 4.3 | 138 | 13.52 |
| Vodafone | 89 | 14.75 | 1 | 0 | 90 | 08.82 |
| Others | 105 | 17.41 | 58 | 13.9 | 163 | 15.98 |
| Total | 603 | 100 | 417 | 100 | 1020 | 100.00 |

- The percentage of the 'wireless customers' was 59.1% (603) in comparison with wire line customers of 40.9% (417), shows that the customers were almost equally divided between wireless and wire line.
- BSP wise observed proportion of ' wireless to wire line' customers was as below:
 - o Airtel 16%Vs 12.23%,

- o BSNL 14.42% Vs 56.59%,
 - o Tata 17.41% Vs 12.17%,
 - o Reliance 19.9% Vs 4.3%,
 - o Vodafone with 14.75 % with total wireless customer base.
 - o Others 17.41% and 13.9%.
- As already noted in the Table no. 1.5 from chapter ‘Introduction’; state owned PSU BSNL had the largest subscriber base of 60.74; same trend is noted when it comes to respondents for this study and has maintained leadership in ‘wire line’ broadband.
 - Furthermore as per the Table 1.6 from chapter ‘Introduction’ Airtel (23.87%), Vodafone (20.84), Reliance (12.63%) and Tata (1.65%) were BSPs with respective broadband customer base in wireless. When it comes to this study; there is more deviation in customer base of Tata; the wireless customer base increased from 1.65% to 17.41%, whereas there is slightly deviation in the customer base of Airtel (16%), Vodafone (14.75%) and Reliance (19.9%).
 - From Table 4.6 it is observed that; there was intense competition within the top five wireless BSPs as compared to wire line competition in wire line. Rest of the BSPs (other than top five BSPs); from wireless and wire line had only 17.41% and 13.9% of the total customers.

8. Type of the plan (Prepaid/Postpaid) and ‘Average house hold Income per month’ of the respondents.

- Income category ‘40K and above’ had 35.89% of the prepaid broadband users and 27.27% postpaid users (difference of 8.62%); Income category ‘10K to 20K’ had 20.07% of the prepaid users and 29.98% of the postpaid users (difference of 9.91%). It shows within the income categories, there is marginal difference between the percentage of the ‘prepaid’ and ‘post paid’ customers.
- Comparatively there was less difference in the prepaid and post paid users from lower income categories ‘Less than 10K’ and ‘20K to 40K’ (3.3% and 4.6%), as

compared to higher income categories, hardly any difference between the wireless and wire line users.

- From the Table 4.7 it is seen that, from the income categories ‘Less than 10K’ and ‘10K to 20K’ the percentage of the postpaid users was more as compared to the percentage of the prepaid users (9.83% Vs 6.53%; and 29.98% Vs 20.07% respectively);
- On the other side the no. of postpaid users was less as compared to prepaid users in other two higher income categories (‘20K to 40K’ and ‘40K and above’).
- There were 40 users each in income group ‘Less than 10K’, shows prepaid and post paid users were equally divided.
- When it comes to income group ‘10K to 20K’ they too (prepaid and postpaid respondents) were equally divided, but as monthly house hold income increased ‘20K’ and ‘40K’ and above there is noticeable difference.
- The proportion of the ‘postpaid to prepaid’ broadband users from income group ‘20K to 40K’ was 36.81: 63.18; whereas it was 33.53: 66.46, almost double when it comes to income group ‘40K and above’.

Table 4.7

| Type of Plan | Average house hold Income per month (In Rs) | | | | | | | | Total Count |
|--------------|---|------|------------------|--------|------------------|--------|------------------|--------|-------------|
| | Less than 10,000 | | 10,000 to 20,000 | | 20,000 to 40,000 | | More than 40,000 | | |
| | Count | % | Count | % | Count | % | Count | % | |
| Prepaid | 40 | 50% | 123 | 50.20% | 230 | 63.18% | 220 | 66.46% | 613 |
| Postpaid | 40 | 50% | 122 | 49.80% | 134 | 36.81% | 111 | 33.53% | 407 |
| Total | 80 | 100% | 245 | 100% | 364 | 100% | 331 | 100% | 1020 |

9. ‘Education qualification’ of the respondents and use of the broadband for ‘Academics’ and ‘Entertainment’ purpose.

- The ‘Graduates’ (35.08%) and ‘Postgraduates’ (37.04%) using broadband for ‘academics’ and had higher percentage of broadband users using it for academic purpose if compared with the total undergraduates (27.86%), who were using broadband for the same reason.
- Identical observation was there in case of the broadband use for ‘Entertainment purpose’, the utmost users were from ‘Graduates’ and ‘Postgraduate’ (48.84% and 28.80% respectively).

Table 4.8

| Usage of broadband Academic s | Education | | | | | | | | |
|----------------------------------|-----------|----------|----------------|---------|----------|---------|---------------|---------|-------|
| | Up to SSC | | Under Graduate | | Graduate | | Post Graduate | | Total |
| | Count | %(Total) | Count | Table % | Count | Table % | Count | Table % | Count |
| Yes | 21 | 6.88% | 64 | 20.98% | 107 | 35.08% | 113 | 37.04% | 305 |
| Usage of broadband Entertainment | | | | | | | | | |
| Yes | 27 | 6.22% | 70 | 16.12% | 212 | 48.84% | 125 | 28.80% | 434 |

- More graduates using broadband for ‘Entertainment’ than ‘Academic’ purpose, whereas the trend is reverse in the ‘Post graduates’; more no. of post graduates were using broadband for ‘Academic’ purpose than for ‘Entertainment’.
- There was no difference as such in the no. of broadband users who were under graduates and were using broadband for academic and for entertainment purpose.

10. ‘Occupation’ of the respondents and usage of broadband for ‘Entertainment’

- It is observed that of all the respondents who use broadband for entertainment, their total to be 434, of these 252 were salaried (53.45%); students were 66 (15.21%) and homemakers were 42 (9.68%).

- If the percentage arranged in the decreasing order, the salaried topped the list for using broadband for entertainment. This may be attributed towards relaxing and releasing stress that may be attributed towards routine work for the salaried class.

Table 4.9

| Usage of broadband and Entertainment | Occupation | | | | | | | | | | | | |
|--------------------------------------|------------|-----------|---------|-----------|---------------|-----------|--------------|-----------|------------|-----------|--------|-----------|-----------|
| | Salaried | | Student | | Self Employed | | Professional | | Home maker | | Others | | Total Row |
| | Count | % (Total) | Count | % (Total) | Count | % (Total) | Count | % (Total) | Count | % (Total) | Count | % (Total) | |
| Yes | 232 | 53.46% | 66 | 15.21% | 37 | 8.53% | 47 | 10.83% | 42 | 9.68% | 10 | 2.30% | 434 |

11. Average house hold 'Income' per month (In Rs) and use of broadband for 'Entertainment'.

- The no. of the broadband users who using broadband for entertainment was more from 'higher income' group. Out of total customers 434, who were using broadband for entertainments, highest 161 (37.1%) were from income group '20K to 40K' followed by from income group 'More than 40K' were 142 (32.71%).

Table 4.10

| Use for Entertainment | Average house hold Income per month (In Rs) | | | | |
|-----------------------|---|------------------|------------------|------------------|-------------|
| | Less than 10,000 | 10,000 to 20,000 | 20,000 to 40,000 | More than 40,000 | Total |
| | Count (%) | Count (%) | Count (%) | Count (%) | Count |
| Yes | 30(37.5%) | 101 (41.22%) | 161 (44.23%) | 142 (42.9%) | 434(42.54%) |
| No | 50(62.5%) | 144(58.77%) | 203(55.76%) | 189(57%) | 586(57.45%) |
| Total | 80(100%) | 245(100%) | 364(100%) | 331(100%) | 1020(100%) |

- The respondents from the lower income categories ‘less than 10K’ and ‘10K to 20K, those using broadband for entertainment were 30 and 101 only.
- It is observed that from each income category, about 40% of the respondents using broadband for entertainment, it shows that of the total respondents’ alternate broadband user using it for entertainment.

12. ‘Education’ of the respondents and usage of broadband for ‘Searching and gathering of Information’.

Table 4.11

| Usage of broadband Searching and gathering of Information | Education | | | | | | | | | |
|--|-----------|------|----------------|-------|----------|--------|---------------|--------|-------|------|
| | Up to SSC | | Under Graduate | | Graduate | | Post Graduate | | Total | |
| | Count | (%) | Count | (%) | Count | (%) | Count | (%) | Count | (%) |
| | 30 | 5.4% | 82 | 14.9% | 239 | 43.45% | 199 | 36.18% | 550 | 100% |

- There were 550 respondents who were using broadband for ‘searching and gathering information’. It is observed that, of the total respondents who responded positively, there were more ‘Graduates’ 239 (43.45%) and ‘Post graduates’ 199 (36.18%). Shows broadband is very useful and needed to graduates and post graduates in their daily life as they are linked with the academics, teaching and knowledge sharing with subordinates, students and friends.
- Whereas the percentage of the ‘Undergraduates’ and individuals whose education qualification was ‘up to SSC’ and using broadband for searching information was on lower side. The lower percentage was due to the fact that their scope w.r.t. data collection and sharing of the data is limited. [30 (5.4%) and 82 (14.9%) respectively]

13. Most preferred method to register the complaint

- ‘702’ respondents out of ‘1020’ (68.82%), preferred to complaint via telephone to the customer care while registering the complaints; it shows ‘registering complaints via telephone’ was the most preferred method by the surveyed broadband customers. This indicates that people don’t have time to visit and register the complaints due to their busy schedule, and registering with telephonic call is the easiest and cheapest way to log a complaint.
- The 2nd preferred method to register the complaint is via e-mail, as 12.94% of the total respondents using e-mail as a method to register the complaints. This is another easiest way to log the complaint, but needs another working internet connection with customer. Now a day’s only those having alternate internet could log the complaint.

Table 4.12

| Most preferred method to register the complaint | Total Count | % |
|---|-------------|--------|
| Telephone to customer care center | 702 | 68.82% |
| Through an e-mail | 132 | 12.94% |
| Direct visit to Office | 91 | 8.92% |
| Telephone call to Nodal Officer | 95 | 9.31% |
| Total | 1020 | 100% |

- Registering complaints by ‘direct visit to the office’ and ‘direct phone call to nodal officer’; had least percentage of respondents among all methods of registering complaints. (8.9% and 9.3%). People have to spare the time for visiting office directly to register the complaint. Mostly if the complaint not resolved within the expected time people use to call nodal officer at the last moment. Could be the reason for lower percentage.

14. ‘Occupation’ of the respondents and reason for subscribing to the services of particular Service Provider ‘Quick response from Service Provider’.

- As salaried and students use internet for various purposes and for on line activities, office related work, searching information, one don’t want disconnection in it. If disconnected, they expect quick response from BSP. Out of the total respondents subscribed (539) for ‘quick response from BSP’s’, the highest percentage of respondents were of ‘salaried’ 49.15% (265) followed by ‘students’ 20.77% (112).

Table 4.13

| Reasons for subscribing to the particular Service Provider Quick response from Service Provider | Occupation | | | | | | | | | | | | |
|---|------------|---------|---------|---------|---------------|-------|--------------|---------|------------|-------|--------|-------|-------------|
| | Salaried | | Student | | Self Employed | | Professional | | Home maker | | Others | | Total Row |
| | Count | % | Count | % | Count | % | Count | % | Count | % | Count | % | Count (%) |
| Yes | 265 | 49.15 % | 112 | 20.77 % | 51 | 9.4 % | 64 | 11.87 % | 29 | 5.3 % | 18 | 3.3 % | 539 (100 %) |

15. ‘Good after sales services’, as the reason for subscribing to the particular Broadband Service Provider.

- The percentage of the respondents’ subscribed services of particular BSP only for ‘good after sales and services’ was only (36.27%).
- More broadband users from ‘Salaried’ class and ‘students’ subscribed services of BSPs expecting ‘good after sales services’, and their percentage was 47.57% (176) and 21.08% (78) respectively.

Table 4.14

| | Occupation | | | | | | | | | | | | Row % | Total |
|-------|------------|-----------|---------|-----------|---------------|-----------|--------------|-----------|------------|-----------|--------|-----------|-------|-------|
| | Salaried | | Student | | Self Employed | | Professional | | Home maker | | Others | | | |
| | Count | % (Total) | Count | % (Total) | Count | % (Total) | Count | % (Total) | Count | % (Total) | Count | % (Total) | | |
| No | 352 | 54.15 % | 130 | 20.00 % | 52 | 8.00 % | 69 | 10.62 % | 31 | 4.77 % | 16 | 2.46 % | 64 % | 650 |
| Yes | 176 | 47.57 % | 78 | 21.08 % | 42 | 11.35 % | 43 | 11.62 % | 23 | 6.22 % | 8 | 2.16 % | 36 % | 370 |
| Total | 528 | 51.76 % | 208 | 20.39 % | 94 | 9.22 % | 112 | 10.98 % | 54 | 5.29 % | 24 | 2.35 % | 100 % | 1020 |

16. 'Gender' of the respondents and expectations towards security in broadband as 'Password protected'.

- '608' out of total surveyed '1020' respondents (i.e. 59.6%), expecting security as 'password protected' in broadband services. This shows 40.39% of the customers were not at all bother about the security protection with 'password'.
- Of the total respondents who expecting password security, males' were 69.07% (420), much more than the percentage of the females 30.9% (188), shows more no of males were vigilant about the internet use and password security as compared to females.

Table 4.15

| Security level expected from the Service Provider Password protected | Gender | | | | Total Count |
|---|--------|---------|--------|---------|----------------|
| | Male | | Female | | |
| | Count | % (Row) | Count | % (Row) | |
| No | 274 | 66.5% | 138 | 33.49% | 412 |
| Yes | 420 | 69.07% | 188 | 30.9% | 608 |
| Total | 694 | 68% | 326 | 32% | 1020 |

17. ‘Occupation of respondents’ and security level expected from the Service Provider as a ‘Password protected’.

- Of the total respondents those who expected ‘security in password protection; 31.2% were salaried, 11.7% students. The respondents from these two occupation categories had highest percentage of the respondents who were expecting password security while using broadband. Shows there is more awareness related to internet security among salaried broadband users and students as compared to broadband users from other occupation categories.

Table 4.16

| Security level expected from BSP | Occupation | | | | | | | | | | | | Total |
|--------------------------------------|------------|-------|---------|---------|---------------|---------|--------------|---------|------------|---------|--------|---------|-------|
| | Salaried | | Student | | Self Employed | | Professional | | Home maker | | Others | | |
| Password protected | Count | (%) | Count | Table % | Count | Table % | Count | Table % | Count | Table % | Count | Table % | Count |
| No | 210 | 20.6% | 89 | 8.7% | 35 | 3.4% | 52 | 5.1% | 20 | 2.0% | 6 | .6% | 412 |
| Yes | 318 | 31.2% | 119 | 11.7% | 59 | 5.8% | 60 | 5.9% | 34 | 3.3% | 18 | 1.8% | 608 |
| Total | 528 | 51.8% | 208 | 20.4% | 94 | 9.2% | 112 | 11.0% | 54 | 5.3% | 24 | 2.4% | 1020 |
| x | | | | | | | | | | | | | |
| Password change as and when required | Count | (%) | Count | (%) | Count | (%) | Count | (%) | Count | (%) | Count | (%) | |
| No | 402 | 39.4% | 165 | 16.2% | 77 | 7.5% | 87 | 8.5% | 38 | 3.7% | 18 | 1.8% | 787 |
| Yes | 126 | 12.4% | 43 | 4.2% | 17 | 1.7% | 25 | 2.5% | 16 | 1.6% | 6 | .6% | 233 |
| Total | 528 | 51.8% | 208 | 20.4% | 94 | 9.2% | 112 | 11.0% | 54 | 5.3% | 24 | 2.4% | 1020 |

- The percentage of the surveyed respondents who responded positively towards ‘Security in password change as and when required’ was only 22.28% (233/1020), and balance 77.72% users not responded in affirmation. It shows that when it comes to ‘password change whenever required’ as a security facility is not yet widely accepted by the present broadband users from Pune city.

- It shows that the broadband users from Pune city were lethargic and almost unconcerned about on line security. It has been recommended by experts that the password must be changed very often.

18. Respondents' gender and satisfaction with the present Service Provider

- Of the total respondents surveyed, 51.3% males and 24.6% females were satisfied with the services by their respective BSP's. In addition to it the percentage of the males and females who were 'highly satisfied' was 7.6% and 3.6% respectively.
- There were '694' respondents who were males; of these '523' (75.36%) were satisfied with the services provided by their BSPs. Those males who were not satisfied or highly dissatisfied total to be 93 (13.4%).
- Similarly, of the total 326 females, 288 (88.34%) were satisfied or highly satisfied with the services by their respective BSPs and 38 (11.65%) females were not satisfied or highly dissatisfied.

Table 4.17

| Satisfaction with the present Service Provider | Gender | | | |
|--|--------|-----------|--------|-----------|
| | Male | | Female | |
| | Count | % (Total) | Count | % (Total) |
| Highly satisfied | 78 | 11.23% | 37 | 11.34% |
| Satisfied | 523 | 75.36% | 251 | 76.99% |
| Not satisfied | 86 | 12.39% | 37 | 11.34% |
| Highly dissatisfied | 7 | 1% | 1 | .03% |
| Total | 694 | 100% | 326 | 100% |

- Though the overall percentage of the dissatisfied respondents (males and females) is less 12.8% (131 out of 1020) (table 4.17); 47.64% (i.e. 486 out of 1020) were switching over positively and undecided (may be) to switch in coming days. (Ref Table 4.18, below).

19. 'Income' of the respondents and 'Switching over' of the customers.

Table 4.18

| Are you planning to switch over to another Service Provider? | Average house hold Income per month (In Rs) | | | | | | | | |
|--|---|-----------|------------------|----------|------------------|----------|------------------|----------|------|
| | Less than 10,000 | | 10,000 to 20,000 | | 20,000 to 40,000 | | More than 40,000 | | |
| | Count | % (Total) | Count | %(Total) | Count | %(Total) | Count | %(Total) | |
| No | 36 | 6.74% | 119 | 22.28% | 191 | 35.77% | 188 | 35.21% | 534 |
| Yes | 15 | 9.93% | 38 | 25.17% | 51 | 33.77% | 47 | 31.13% | 151 |
| May be | 29 | 8.66% | 88 | 26.27% | 122 | 36.42% | 96 | 28.66% | 335 |
| Total | 80 | 7.84% | 245 | 24.02% | 364 | 35.69% | 331 | 32.45% | 1020 |

- Of the total customers (151) who were 'positively' switching over to another BSP had highest percentage of customers from income group '20K to 40K' and from income group '40K and above' (33.77% and 31.13%).
- Out of total customers (335) who were undecided (may be), 36.42% (122) were from income group '20K to 40K' and 28.66% (96) from 'more than 40K'.
- As compared to lower income group 'below 10K' and '10K to 20K' broadband users did not plan to shift their present BSP, but the respondents belonging to '20K to 40K' and '40K and above' were positively or planning to switch their present BSP.

20. Type of the plan (Prepaid/Postpaid) and switching over of the customers

- There is significant difference in the postpaid customers and prepaid customers who were switching over to another BSP. Out of 613 prepaid customers 242 (39.9%) were prepaid and of the total 407 postpaid customers, 244 (59.9%) were postpaid customers. It shows that the percentage of the postpaid customers who were going to shift was significantly more as compared to prepaid customers.
- Out of 151 customers who were definitely switching over to another BSP; 85 (56.29%) were postpaid customers and 66 (43.71%) were prepaid customers. In

addition to this, of the total 335 customers who were planning to switch to another BSP: 52.54% (176) were prepaid customers and 47.46% (159) were postpaid.

Table 4.19

| Are you planning to switch over to another Service Provider? | Type of Plan | | | | Total Row |
|--|--------------|--------|----------|--------|-----------|
| | Prepaid | | Postpaid | | |
| | Count | % | Count | % | Count |
| Yes | 66 | 43.71% | 85 | 56.29% | 151 |
| May be | 176 | 52.54% | 159 | 47.46% | 335 |
| Total | 613 | 60.10% | 407 | 39.90% | 1020 |

- It shows that the service provided to the postpaid customers were below their expectations as a result of it, more no. of the postpaid customers were switching over to another BSP as compared to the prepaid customers.

21. Type of the broadband (wireless or wire line) and ‘Education qualification’ of the respondents:

- (Table 4.1); shows; among the surveyed broadband respondents (1020) the ‘Graduates’ and ‘Post-graduates’ were more in number (45.29% and 31.18% respectively) as compared to ‘Under Graduates’ (23.56%). It shows graduates and postgraduates need broadband for their routine work and hence were more in number.
- From ‘603’ wireless subscribers half of the customers i.e. 47.43% (286) were ‘Graduates’ and had highest percentage of broadband users from all education qualification categories, next to this the higher broadband users were ‘Post graduates’ 27.69% (167). Likewise there were 42.21% (151) ‘Graduates’ and 36.21% (151) ‘Post graduates’ highest from wire line category too (out of total 417).

- 61.90% of the graduates, 62.64% of the undergraduates and 62.12% of the respondents whose educational qualification is ‘Up to SSC’ were using wireless broadband services. From the broadband users the percentage of the wireless and wire line found to be 60:40. Whereas wireless and wire line customers from ‘Post graduate’ were divided equally.

Table 4.20

| Type of broadband | Education | | | | | | | | |
|--------------------|-----------|--------|----------------|--------|----------|--------|---------------|--------|-------|
| | Up to SSC | | Under Graduate | | Graduate | | Post Graduate | | Total |
| | Count | % | Count | % | Count | % | Count | % | Count |
| Wireless Broadband | 41 | 62.12% | 109 | 62.64% | 286 | 61.90% | 167 | 52.51% | 603 |
| Wired Broadband | 25 | 37.88% | 65 | 37.35% | 176 | 38.09% | 151 | 47.48% | 417 |
| Total | 66 | 100% | 174 | 100% | 462 | 100% | 318 | 100% | 1020 |

22. ‘Occupation’ of the respondents and reasons to prefer wireless broadband ‘To use all over’.

Table 4.21

| Reason to prefer the wireless broadband To use all over | Occupation | | | | | | | | | | | | Total Row | |
|---|------------|-------|---------|--------|---------------|-------|--------------|-------|------------|-------|--------|-------|-----------|-------|
| | Salaried | | Student | | Self Employed | | Professional | | Home maker | | Others | | | Total |
| | Count | % | Count | % | Count | % | Count | % | Count | % | Count | % | | Row |
| | 200 | 55.4% | 71 | 19.66% | 34 | 9.41% | 30 | 8.31% | 18 | 4.98% | 8 | 2.21% | | 361 |

- Although wireless broadband has the convenience of using it all over, out of total 603 wireless respondents only 35.39% (361) of the respondents were preferred wireless broadband services.
- Out of 361 respondents who preferred broadband to use it all over, 55.40 % (200) respondents from ‘Salaried’ class and 19.66% (71) were students. It is evident

that salaried class and students preferred wireless broadband for the convenience of using it all over.

- The no. of respondents from 'Homemaker' and 'Professional' class had least no. of broadband customers and their percentages were (4.98% and 8.31%), who preferred wireless broadband for this reason.

4.2. Findings and discussions

As per the objectives formulated for this study, researcher was interested in.

- Understanding the customer needs,
- Understanding expectations and customer satisfaction with respect to broadband services provided by the various Broadband Service Providers and,
- To analyze the gap between the services expected by the broadband customers and the services delivered by various Broadband Service Providers, related to the objectives formulated were discussed below.

4.2.1. Objective-1 and findings: To study the various customer needs and expectations with respect to broadband services in Pune city.

1. Broadband Service providers from Pune

- Following table represents Broadband Service Providers in Pune City.

Table 4.22

Name of the organizations that provide Broadband services in Pune (Arranged alphabetically)

| Sr. | Name of the BSP |
|-----|-------------------------|
| 1 | Airtel |
| 2 | BSNL |
| 3 | Hathway |
| 4 | MTS |
| 5 | Reliance Communications |
| 6 | Sify |
| 7 | Tata Communications |
| 8 | Tikona |
| 9 | YOU Broadband |
| 10 | Vodafone |

- There were ten broadband service providers in Pune city. They are providing broadband services on wireless and/or wire line technologies. Customers were using broadband for various applications such as email, data transfer, on line audio/video chat, on line conferencing/presentations, on line music/entertainment and for on line transactions/payments as per their need and requirements.
- Depending on the purpose and application for which the broadband is being used; the customers had different needs, wants and expectations about the broadband services from their Broadband Service Providers.
- Each web application requires different download speed, quality and reliability of broadband services. The speed, quality and reliability of the broadband depend on the quality of the network and infrastructure available with the BSPs.
- Expectations of the broadband customers are not only limited to network quality and its performance but extend beyond this. Customers expect support and cooperation from the staff of the BSP's, who were involved in the delivery of broadband services.
- Researcher wanted to know what were the various needs and expectations of the customers associated with the broadband services. Following are the findings with respect to objective 1 of the study.

2. 'Wide range of services' as the reason for subscribing to the services particular Broadband Service Provider:

- The researcher wanted to investigate whether the various types of services provided by the BSP's had any influence on the consumer's decision for selecting the particular BSP, and the findings are:
- Table 4.23 shows the responses of the respondents to the question whether they subscribed to the particular BSP because of wide range of services provided. It is not surprising to note that only 37.4% had answered in affirmation. Therefore it can be concluded that the subscribers do not look for the range of the service

categories provided but something more than that.

Table 4.23

‘Wide range of services’ as a reason for subscribing services of particular Service Provider,

| ‘Wide range of services’ | Frequency | Percent |
|--------------------------|-----------|---------|
| No | 639 | 62.6 |
| Yes | 381 | 37.4 |
| Total | 1020 | 100.0 |

3. ‘Technical staff availability as per convenience’ as a reason to prefers particular Broadband Service Provider and Occupation of respondents:

- With opening of the economy two decades ago, number of players with technological advancements came in to every area. As an effect of it numbers of alternatives in products/services were easily available in the market to the customers and market shifted from product/services concept to customer focused market.
- In this customer focused market, it is but needed that the service providers reach to the customers door steps. Broadband services also not an exception to this phenomenon. Today all BSP’s are making every effort to reach to the customer and offer broadband services with various plans and discounts. The BSP’s are adopting different strategies that to suite the customer demands so that to attract the customers. Thus the broadband customers also expecting special treatment from Broadband Service Providers.
- Following Table 4.24 shows, the responses of the respondents to the question ‘what are the various reasons while preferring services of particular BSP’. Of all the respondents, 244, respondents had said that, they subscribed to the particular BSP, as its staff was available as per the convenience of the customer.

Table 4.24

The reasons for subscribing to the particular Service Provider, 'Technical staff availability as per convenience' and 'Occupation' of respondents.

| Technical staff available as per our time schedule | Occupation | | | | | | | | | | | | Total | |
|--|------------|----|---------|------|---------------|-----|--------------|------|------------|-----|--------|-----|-------|------|
| | Salaried | | Student | | Self Employed | | Professional | | Home maker | | Others | | count | % |
| | Count | % | Count | % | Count | % | Count | % | Count | % | Count | % | | |
| Yes | 127 | 52 | 43 | 17.6 | 22 | 9.0 | 33 | 13.5 | 11 | 4.5 | 8 | 3.3 | 244 | 100% |

- Of these, 52% of the respondents were salaried. It can be inferred that as salaried class are duty bound during their office timings, they subscribed to services of the BSP's provided technical support when the customers had the time. Whereas only 4.5% was the number of 'Home makers' who probably were most of the time available at home, and were expecting the staff from BSP should be available as per the time and convenience.

4. 'Quick response and service feedback' as a reason to prefer services of particular BSP:

- The table 4.25 shows that 52.8% of the total customers prefer broadband services of the particular BSP, expecting 'quick response' from respective service providers. This shows that while selecting services of particular BSP 'quick response' is the most accepted reason by the broadband users. Whereas 18.4% of the customers had chosen services of particular BSP keeping in view 'service feedback of customers' and 'follow-up of the complaints'. 36.3% of the total broadband customers opted for the services of the particular BSP because of 'quick after sales and service'.

Table 4.25

Table showing reasons for subscribing to the particular BSP, ‘Quick response from Service Provider’; Service feedback and follow-up; Good after sales services.

| Reasons for subscribing to the BSP | Yes | | No | Total |
|--------------------------------------|-------|-------|-------|-------|
| | Count | % | Count | |
| Quick response from Service Provider | 539 | 52.8% | 481 | 1020 |
| Service feedback and follow-up | 188 | 18.4% | 650 | 1020 |
| Good after sales services | 370 | 36.3% | 832 | 1020 |

5. Intensity of need for broadband services.

- The researcher next wanted to find out how intense was the necessity of broadband services for the broadband users. With respect to ‘Objective 1’, this study focused on finding out the needs of the broadband subscribers. To investigate this researcher thought it would be best to probe what would the broadband user miss the most, if broadband services were not available. Table 4.26 shows that the responses of the respondents.

Table 4.26

Intensity regarding necessity of broadband.

| If broadband services not available | Frequency | Percent |
|--|-----------|---------|
| I will feel lost | 322 | 31.6 |
| I will have to spend time, waiting in queue to pay bills | 212 | 20.8 |
| I will have to visit a nearby Net café | 477 | 46.8 |
| I will have to visit bank/ATM for transactions | 317 | 31.1 |
| I will miss my routine | 455 | 44.6 |

- It can be noticed from the table 4.26 that 31.6% of the respondents felt that if the broadband services were not available they would feel lost. 31.6% although a small figure, it is an indication of what is likely to happen in future. The power of

internet, social media, information at one click touching everybody's lives and users of broadband will feel that they are lost if broadband not available.

- 20.8% of the customers said that they have to spend time, waiting in queue to pay bills if the broadband was not available.
- Once people start missing their routine or feel lost due to unavailability of the broadband, they look for the alternative. To probe further the researcher deliberately had asked whether the respondents would miss their routine if broadband was not available.
- It was of interest for the researcher to investigate that what would respondents would be looking for as an alternative and 46.8% of the respondents said that they would visit the net café rather than compromise with the situations of no broadband.
- 31.1% of the customers replied that they have to visit bank/ATM for transactions physically, which is time consuming and hectic one.

6. Security in broadband

Table 4.27

'Password protection' as a security level expected by customers in broadband services.

| Password protected | count | Total % |
|--------------------|-------|---------|
| No | 412 | 40.4% |
| Yes | 608 | 59.6% |
| Total | 1020 | 100% |

- Researcher was also aware that the use of internet for on line transactions even in urban cities like Pune is not an accepted mode of financial transactions. Therefore to understand what was needed in case of security and safety related to on line

financial transactions, the researcher had asked whether security related issues is what the subscribers look for and in response to that 59% of the respondents said that they would look for minimal of password protected services (Table 4.27).

- In contrast to above findings, 77.2% of the people said they don't expect security level of changing password as and when required.(Table 4.28)

Table 4.28

Broadband customers' expectations towards 'Password change as and when required'.

| Password change as and when required | count | Total % |
|--------------------------------------|-------|---------|
| No | 787 | 77.2% |
| Yes | 233 | 22.8% |
| Total | 1020 | 100% |

7. Customer's expectations and Quality of modem supplied.

Table 4.29

Opinion of the customers about performance of Modem/USB supplied by the BSP's.

| Quality of the modem if supplied by the Service Provider | Modem/USB | |
|--|-----------|--------|
| | Count | |
| Excellent | 167 | 16.37 |
| Good | 514 | 50.39 |
| Satisfactory | 266 | 26.07 |
| Poor | 16 | 1.56 |
| Not Supplied | 57 | 5.58 |
| Total | 1020 | 100.0% |

- Every customer expects quality and the better performance of the Modem/USB Dongle if supplied by the BSP, and expects replacement and maintenance warranty in future with it, in case of any problem. The data presented in table 4.29 shows that 94.42% of the broadband users of modem/USB supplied by their respective BSP's.
- Researcher wanted to find the opinion about quality and performance of the modem supplied therefore respondents were asked about 'Quality and performance of the Modem/USB supplied and satisfaction if the customers were satisfied, in response to these customers answered that:
 - o Who had Modem/USB that was supplied by BSP; 16.37% customers said that the quality of the modem/USB was 'excellent', 50.39% said that it was of 'Good' quality and 26.07% said it was just 'satisfactory'.
 - o Whereas only 1.56% users said that the modem/USB supplied was of 'Poor' quality.
 - o Out of total respondents 5.58% of the customers were using their own modem.
- It can be seen that about 92.83% of the broadband customers are satisfied with the quality and performance of the modem/USB supplied, which shows that BSPs are supplying Modem/USB of hood quality and same have to maintain by them in future too.

4.2.2. Objective 2; its findings: To identify the gaps between the expectations of customers and service delivered related to broadband services in Pune city.

- After having analyzed the literature extensively the researcher had clearly understood the complexity of issues regarding customer satisfaction in utilization of services. Intangibility, Inconsistency, Inventory and Inseparability, are the 4I's of services marketing. Because of these 4I's of services, their nature and role in the services, the researcher specially was interested in knowing the gaps between

the services expected and actual services delivery, the gap lead to measurement of customer satisfaction.

- The researcher identified 13-parameters which were thought to be important in case of delivery of broadband services, starting with ‘Initial activation period’ to the ‘Overall quality of service’ by the BSP’s to the customers, which shows the overall customer satisfaction of the broadband users against the services delivered by the Broadband Service Providers. ‘Customer expectations’ and ‘Actual service delivery’ were measured on 10 –point rating scale.
- If the difference between the expected services (E) and actual services delivered (A); i.e. (E - A) is a positive score, it indicates that the BSP’s falls short of the expectations of the customers. On the other side if the difference (E - A) is negative, then the BSP’s were found to be delivering broadband services more than the expectations of the customers.
- Table 4.30 shows, the summary of the difference in mean for the 13 parameters between ‘expected’ and ‘actual services’ delivered. 13th parameter is for the ‘Overall quality expectations’ and ‘Actual services delivery’ against which customers gave the rating on 10 –point scale.
- It is observed from Table 4.30, the responses given by the respondents that there exists the gap between the ‘expected services’ by the broadband customers and the ‘actual services delivered’ by the BSP’s (E – A); and the ‘gap’ in each case was positive.
- Broadband Service Providers were not providing services up to the expectations of the customers which measure out that the customers who were using broadband were not satisfied with the services provided by the respective BSPs.
- The lowest ‘service gap’ was in ‘Initial activation time’ of the broadband (Sr. No. 1; +0.614), followed by ‘Fault booking process’ (Sr. No. 5; +0.853). This shows that the BSPs delivering broadband services somewhat closer to the expectations of the customers with respect to these two parameters i.e in case of ‘activation of

the broadband after request' and in the 'fault booking process', whenever the customers are registering the complaint in case of broadband fault.

Table 4.30

The mean scores for 'expectations' and 'actual services delivered' by BSP's and gaps between the mean scores.

| Sr | Name of the parameter | Mean Expected Score (E) | Mean Actual Score (A) | GAP = Difference of (E-A) |
|----|--|-------------------------|-----------------------|---------------------------|
| 1 | Initial broadband activation time period. | 6.846 | 6.231 | +0.614 |
| 2 | Expected broadband speed as per plan and actual speed delivered. | 6.977 | 6.061 | +0.915 |
| 3 | Consistency in the promised upload & download speed. | 6.940 | 5.916 | +1.023 |
| 4 | Download speed when in sharing with more than one computer. | 6.918 | 5.873 | +1.045 |
| 5 | Fault booking process. | 6.940 | 6.127 | +0.812 |
| 6 | Ease of access to Customer Care Centre. | 7.245 | 6.344 | +0.900 |
| 7 | Response given by the Customer Care Executive. | 7.237 | 6.325 | +0.911 |
| 8 | Transparency in billing. | 7.397 | 6.543 | +0.853 |
| 9 | Process of resolution of usage/billing related complaints. | 7.254 | 6.340 | +0.914 |
| 10 | Co-ordination between customer care and technical staff. | 7.252 | 6.245 | +1.011 |
| 11 | Technical support from Service Provider. | 7.312 | 6.349 | +0.963 |
| 12 | Overall assistance from the service provider. | 7.347 | 6.412 | +0.934 |
| 13 | Overall quality of broadband. | 7.448 | 6.496 | +0.951 |
| | | | | |

Some of the striking observations are as below:

- Whereas the gap observed between the expected and actual services delivered was maximum in case of the 'Co-ordination between customer care and technical staff'(Sr. No. 10; +1.011) and in case of 'Download speed when in sharing with more than one computer'(SR. No. 4; +1.045). This shows that the staff of the BSP's had very poor coordination among themselves as a result of it the services delivered were not delivered as expected by the customers and are much below

the expectations of the customers. Also the ‘downloading speeds when in sharing with more than one PC’s’ were much below the expectations of the customers.

- Gap observed is an indication of efforts made by BSP’s to reduce the gaps, whether they meet these expectations or fall short of the expectations. Every effort thereafter should be made to reduce the gaps; some suggestions are being discussed in Chapter 7, ‘Recommendations’. As the gaps are positive, BSPs can focus on how to reduce these gap related to ‘download/ upload speeds’ and gap related to ‘coordination between the staff’ which are major gap, and efforts made in minimizing these gaps by the Broadband Service Providers will lead to higher customer satisfaction.

4.2.3. Objective 3; its findings: To analyze the customers’ satisfaction, when utilizing the services provided by the service providers.

- In the marketing concept the customer is the focal point and all activities are undertaken to satisfy the needs and wants of the customers. Over a period of years it has now been accepted that satisfied customers not only generate profits but remain loyal and help the organizations create more customers through these satisfied customers.
- Even a single dissatisfied customer may create bad image about the organization. Therefore researcher had formulated this objective. Customers have different needs associated with broadband, accordingly every customer may have different expectations and perceptions in mind and they may have different preferences towards broadband services as well as with the service providers. Researcher formulated this objective to analyze the preferences of the broadband customers and related satisfaction while consuming the services actually.

1. Customer preferences for type of broadband (Wireless and wire line)

- As both the type of the broadband technologies available in the Indian market, customers have more options of services and service providers. As on date most of the time is spent in travelling from one location to another or between the

homes to office or between the different places for office purpose or for any personal reason. Only wireless broadband will support in this situation and serve the purpose when in travelling at different locations.

Table 4.31

Customer preference for wireless broadband ‘To use all over’.

| To use all over. | Frequency | Percent |
|------------------|-----------|---------|
| No | 659 | 64.6 |
| Yes | 361 | 35.4 |
| Total | 1020 | 100.0 |

- Above statistics from Table 4.31 shows that; of the total surveyed broadband customers about 35.4% of the customers’ preferred wireless broadband intensively to use it at different locations as a part of convenience in using the USB, dongles which is plug and play device.

2. Availability of Broadband network and Customer preferences.

- Table 4.32 shows that the percentage of the wireless broadband users is 59% where as that of wire line users is 41%. Out of total wireless broadband users 23.5% of the present wireless broadband users expecting wire line broadband services at their locations, but due to ‘non availability of the wire line network’ at their respective locations they could not avail the wire line broadband services.

Table 4.32

Customer preference towards wire line broadband: in case of ‘non availability of wired line network’.

| Preference to wire line broadband | Frequency | Percent |
|-----------------------------------|-----------|---------|
| No | 782 | 76.7 |
| Yes | 238 | 23.3 |
| Total | 1020 | 100.0 |

- Similarly the statistics from Table 4.33 shows that 14% of additional wireless customers expecting broadband services on wire line due to reason that the ‘wire line network is available but existing wire line network not supporting satisfactory working of the broadband’.
- Thus from these two observations it is clear that in all 43.5% of the present total wireless broadband users were expecting wire line broadband services even though they were using wireless broadband on date of survey.

Table 4.33

Preference of customers’ towards wire line broadband: where wire line network not supporting the satisfactory working of broadband performance’.

| Preference to wire line broadband | Frequency | Percent |
|-----------------------------------|-----------|---------|
| No | 877 | 86.0 |
| Yes | 143 | 14.0 |
| Total | 1020 | 100.0 |

3. Most preferred method to register the complaint

- Of the total surveyed customers the customer preference towards mode of registering the complaint in case of the broadband fault is as below (Table 4.34):
 - o 68% of the customers prefer registering the complaints through telephonic call to CSC.
 - o 12.9% of the total respondent’s prefer booking complaint via e-mail.
 - o 9.3% register by call to nodal officer.
 - o And balances 9.3% of the customers register the complaints by direct visit to office.

- It is clear from above that most preferred method to register the complaint was telephonic call to CSC, as 68% of the total customers registering complaint via telephone.

Table 4.34

Most preferred method to register the complaint. (BSP wise)

| Most preferred method to register the complaint | Broadband service provider | | | | | | | | | Total |
|---|----------------------------|------|----------|------|---------|-------------|--------------|----------|--------|-------|
| | Airtel | BSNL | Vodafone | Sify | Hathway | You Telecom | Tata Indicom | Reliance | Others | |
| • Telephone to customer care center | 86 | 240 | 59 | 16 | 4 | 9 | 110 | 108 | 70 | 702 |
| • Through an e-mail | 27 | 16 | 19 | 5 | 1 | 2 | 28 | 12 | 22 | 132 |
| • Direct visit to Office | 13 | 41 | 2 | 0 | 3 | 5 | 11 | 6 | 10 | 91 |
| • Telephone call to Nodal Officer | 22 | 26 | 10 | 2 | 3 | 1 | 9 | 12 | 10 | 95 |
| • Total | 148 | 323 | 90 | 23 | 11 | 17 | 158 | 138 | 112 | 1020 |

- Also it was supported by the finding from (Table 4.26) that the customers had no time to visit office or officer concerned due to their busy schedule for any related work that is why customers preferred this method which saves time, money and exertion.

4. Response Given by the BSP's to customer requests

- Table 4.35 shows that the services provisioning staff there were different categories of the nature of the customer expectations, although 58.5% of the respondents opined that customer care executives were supportive, it is still way behind. And 6.7% found that the customer center executives were aggressive whereas 2.9% were unsupportive.

Table 4.35

Table showing opinion of the broadband customers about ‘Support and cooperation given by the staff of BSP’s’.

| Response from CSC staff of the BSP | Frequency | Percent |
|------------------------------------|-----------|---------|
| Friendly | 245 | 24.0 |
| Supportive | 597 | 58.5 |
| Aggressive | 68 | 6.7 |
| Submissive | 80 | 7.8 |
| Unsupportive | 30 | 2.9 |
| Total | 1020 | 100.0 |

5. Customer satisfaction with the Broadband Service Provider

- In today’s competitive market BSP’s are trying to provide broadband services at their level best with available infrastructure and human resource. Researcher was interested in analyzing satisfaction of the broadband customers with the services delivered by the respective Broadband Service Providers.
- The statistics from Table 4.36 shows that among the five major BSP’s the percentage of the ‘highly satisfied’ and ‘satisfied’ customers was more with BSNL and Tata followed by Airtel. Whereas Reliance has highest percentage of most dissatisfied customers among the BSP’s followed by Vodafone and Airtel.
- As discussed in the earlier chapter, in services marketing there are many challenges that are created because of 4I’s of the services. When it comes to measuring satisfaction of the customers, satisfaction is sum of total of experience the customer has with the Broadband Service Providers. Unfortunately in broadband services there is no physical evidence that the customer is provided with the customer experiences the way in which the desired web content is delivered on his device. His experience about the ‘Always On’ connectivity will also lead to his satisfaction or dissatisfaction.

Table 4.36

Satisfaction of the customers with their present BSPs

| Broadband service provider | Satisfaction with the present Service Provider | | | | | | | | Total Row |
|----------------------------|--|-------|-----------|-------|---------------|-------|---------------------|------|-----------|
| | Highly satisfied | | Satisfied | | Not satisfied | | Highly dissatisfied | | |
| | Count | % | Count | % | Count | % | Count | % | Count |
| Airtel | 13 | 8.8% | 118 | 79.7% | 16 | 10.8% | 1 | .7% | 148 |
| BSNL | 55 | 17.0% | 243 | 75.2% | 24 | 7.4% | 1 | .3% | 323 |
| Vodafone | 3 | 3.3% | 77 | 85.6% | 10 | 11.1% | 0 | .0% | 90 |
| Sify | 0 | .0% | 18 | 78.3% | 5 | 21.7% | 0 | .0% | 23 |
| Hathway | 1 | 9.1% | 9 | 81.8% | 1 | 9.1% | 0 | .0% | 11 |
| You Telecom | 2 | 11.8% | 11 | 64.7% | 4 | 23.5% | 0 | .0% | 17 |
| Tata Indicom | 21 | 13.3% | 129 | 81.6% | 7 | 4.4% | 1 | .6% | 158 |
| Reliance | 10 | 7.2% | 94 | 68.1% | 31 | 22.5% | 3 | 2.2% | 138 |
| Others | 10 | 8.9% | 75 | 67.0% | 25 | 22.3% | 2 | 1.8% | 112 |
| Total | 115 | | 774 | | 123 | | 8 | | 1020 |

- In order to have data, that would lead to conclusively draw inferences about the satisfaction level, the researcher solicited responses through a simple question ‘How satisfied are you with your present Broadband Service Provider’; it was measured on the four point scale beginning with ‘Highly Satisfied’ and on the other end ‘Highly Dissatisfied’. There were ‘115’ highly satisfied customers and ‘774’ satisfied customers. It is very encouraging for the BSP’s to note that only ‘123’ and ‘8’ respondents were not satisfied and highly dissatisfied respectively.

6. Customer satisfaction and switching over of broadband customers

- The researcher had observed that regulators in principle are encouraging customers to shift to another BSP if they are dissatisfied with their present BSP’s. Mobile Number Portability (MNP), of cellular telephone offered by TRAI and Health insurance portability offered by IRDA and in near future unique account numbers allotted to bank customers.

- These measures may result in shifting of customers from one service provider to another without having to worry about barriers in switching such as no identity. Therefore to measure how many customers were dissatisfied and were planning to change their service providers is shown in table 4.37. With changing technologies, customers have number of service alternatives available and have options of switching over to another service provider.

Table 4.37

The opinion of respondents regarding possibility ‘switching over’ their present BSP.

| Are you planning to switch over to another Service Provider | | Yes | May be | |
|---|-------------|-----------|--------|--------|
| Internet service provider | Airtel | Count | 19 | 50 |
| | | % (Total) | 12.57% | 14.92% |
| | BSNL | Count | 21 | 83 |
| | | % (Total) | 13.90% | 24.77% |
| | Vodafone | Count | 15 | 39 |
| | | % (Total) | 9.93% | 11.64% |
| | Sify | Count | 5 | 12 |
| | | % (Total) | 3.31% | 3.58% |
| | Hathway | Count | 2 | 4 |
| | | % (Total) | 1.32 | 1.19% |
| | You Telecom | Count | 4 | 4 |
| | | % (Total) | 2.64% | 1.19% |
| | Tata | Count | 15 | 52 |
| | | % (Total) | 9.93% | 15.52% |
| | Reliance | Count | 40 | 44 |
| | | % (Total) | 26.49 | 13.13% |
| Others | Count | 30 | 47 | |
| | % (Total) | 19.86% | 14.02 | |
| Total | Count | 151 | 335 | |
| | % (Total) | 100% | 100% | |

- Researcher wanted to know whether the BSP’s providing services up to the satisfactions so that to bind the customers. Table 4.37 shows that among the five major BSP’s.

- Out of total customers (151) who were switching over to another BSP's positively, the percentage of the respondents was more with Reliance 26.49% (40) and BSNL 13.90% (21) followed with Airtel 12.57% (19).
- Similarly out of (335) who were planning to switch; BSNL had maximum customers of 24.77% (83) and TATA 15.52% (52) followed by Airtel 14.92% (50), who were planning to switch over to another BSP.
- Airtel and Reliance had higher percentage of wireless customers (Reference table 4.6), who were facing lot of problem due to frequent disconnection in broadband could be one of the reasons behind switching over (Ref Table 4.40).

7. Switching over and Occupation of the respondents.

- Irrespective of the occupation categories, the individuals who are using broadband for applications such as audio/video chatting, on line audio/video songs, on line movies or games and on line TV need higher download speeds for satisfactory working. Whereas those using broadband for email, minimum data transfer and information sharing requires comparatively lower download speeds. Unless and until needs were satisfied and expectations were met, one will not think of switching over to another service provider.

Table 4.38

Occupation wise switching over of broadband customers.

| Are you planning to switch over to another Service Provider? | Occupation | | | | | | | | | | | | Total |
|--|------------|---------|---------|---------|---------------|---------|--------------|---------|------------|---------|--------|---------|-------|
| | Salaried | | Student | | Self Employed | | Professional | | Home maker | | Others | | |
| | Count | % Total | Count | % Total | Count | % Total | Count | % Total | Count | % Total | Count | % Total | |
| Yes | 82 | 54.3 | 35 | 23.1 | 15 | 9.9 | 14 | 9.2 | 5 | 3.3 | 0 | 0 | 151 |
| May be | 159 | 47.4 | 76 | 22.6 | 31 | 9.2 | 32 | 9.5 | 27 | 8.0 | 10 | 2.9 | 335 |

- Occupation wise; the higher percentage of the respondents ‘positively switching to another BSP’ were from salaried class (54.3%), followed by from ‘students’ class (23.1%). In addition to this the next higher percentage of the respondents who were ‘planning to switch’ to another BSP were also from salaried and students class. (47.4% and 22.6% respectively).
- ‘Home Makes’, self employed’ and from ‘Professional’ class; had least switching over of the respondents from the top leading BSP’s from Pune city. (3.3%, 9.2% and 9.9%)
- It shows that the ‘salaried’ individuals and ‘students’ were having comparatively higher expectations, which were not met by the respective BSP’s and hence were planning to shift to another BSP in anticipation of better services.

4.2.4. Objective 4; its findings: To examine the differences in the broadband services provided by Internet Service Providers on fixed line and wireless technology.

- Telecommunication technology has seen rapid change in last decade and this has been specially discussed in chapter 01; ‘Introduction’. Many BSP’s are operating in the market with different technologies. Broadly the BSP’s can be classified in to two distinct groups; one group which provides broadband services on wireless technology and another group providing broadband services on wired line technology. The researcher wanted to examine which technologies is preferred by the customers and the reasons there of.
- It may be interesting to note that some customers who were subscribing to wire line broadband services also subscribed to wireless broadband services, which have certain obvious advantages such as:
 - a. Use it on the go and anywhere.
 - b. Ease of connectivity.
- On the other hand there were some customers who were presently using wireless broadband also desired wire line services. There are some of the key differences

observed by the researcher in case of wire line and wireless broadband services with respect to the objective 04 of the study, which are as below.

1. Activation time period and Type of broadband (Wireless and Wire line)

- Researcher wanted to distinguish the activation time taken to activate the broadband in both these technologies (wireless and wire line broadband). The table 4.39 shows that in ‘Less than 2 days’, category the percentage were significantly more in case of wireless as compared with wire line.

Table 4.39

‘Time taken to activate the broadband’ and type of broadband (wireless and wire line)

| Type of broadband | Time taken to activate the broadband after the request | | | | | | Total |
|--------------------|--|-------|-------------|-------|-------------|--------------------------|-------|
| | Less than 2 days | | 2 to 4 days | | 4 to 7 days | Between one to two Weeks | |
| Wireless Broadband | 313 | 51.9% | 223 | 36.9% | 45 | 22 | 603 |
| Wired Broadband | 120 | 28.7% | 152 | 36.4 | 70 | 75 | 417 |
| Total | 433 | 42.4% | 375 | 36.7 | 115 | 97 | 1020 |

- Out of total wireless activations 51.9% were activated within two days of the requests customers surveyed, ‘313’ respondents replied that their initial broadband activations were carried out within two days, where as only ‘120’ respondents of the wire line replied that their activations carried out within two days. This show the broadband activations in case of the wireless are much quicker than wire line broadband activations.
- On the other hand the time taken for the activations after four days; ‘145’ out of ‘417’, (34.77%) of the wire line customer delayed too much, whereas only ‘67’ out of ‘603’ (11.11%) wireless broadband were delayed. It shows there is vast difference in the number of the broadband activations in case of wire line and in wireless broadband, where BSP’s have scope for improvement and reduce the timing of activations.

2. Type of broadband (Wireless and Wire line) and Frequency of Faults.

- Frequency of faults is an indicator of the performance of the broadband as it is one of the parameter which affects the performance and overall quality of the broadband services. Researcher wanted to compare the wireless and wire line broadband services, based on this parameter.
- The statistics from table 4.40 shows that: The frequency of the faults observed ‘2 to 4 times in a month’ was much more (45%) in case of wireless broadband, whereas it’s percentage was on lower side i.e. 34% in case of wire line broadband.
- 47.48% of the wire line customers were coming across broadband faults very rarely in comparison with 30.6% in case of wireless broadband which is a good sign for service providers who are providing services on wire line.
- Overall the wireless broadband customers were badly affected due to frequent faults if compared with the customers of wire line.

Table 4.40

Broadband technologies (wireless and wire line) and frequency of broadband faults.

| Type of broadband | Frequency of broadband faults | | | | Total |
|--------------------|-------------------------------|-------------------------|-------------------------|-------------|-------|
| | Very frequently | 2 to 4 times in a month | 4 to 6 times in a month | Very rarely | |
| Wireless Broadband | 75 | 272 | 71 | 185 | 603 |
| Wired Broadband | 49 | 142 | 28 | 198 | 417 |
| Total | 124 | 414 | 99 | 383 | 1020 |

- The wireless technology has an advantage of ‘quicker initial activation time’ but when it comes to ‘frequency of the faults’, wireless technology has higher number of faults as reported by the respondents. This higher percentage in case of wireless broadband may be due to reasons:

- a. Tower failures due to battery and power plant faults/ problems.
 - b. Tower failure due to power prolonged power shut downs/ failures.
 - c. Or may be due to lower signals of the wireless broadband at particular locations.
 - d. In case of wireless towers regular maintenance is required periodically, after initial installations of the towers.
- Whereas in case of the wire line broadband once the copper cable network was constructed, needs least maintenance unless damaged, due to which the services on the wire line were comparatively least affected and are fault free as compared with wireless broadband services. Wireless BSP's has to strengthen the existing network so that to reduce the frequency of the faults for better satisfaction of the broadband customers.

3. Type of broadband (Wireless/Wire line) and Customer Satisfaction:

Table 4.41

Broadband technologies (wireless/wire line) and customers' satisfaction.

| Type of broadband | Satisfaction with the present Service Provider | | | | | | | |
|--------------------|--|----------|-----------|----------|---------------|----------|---------------------|----------|
| | Highly satisfied | | Satisfied | | Not satisfied | | Highly dissatisfied | |
| | Count | Column % | Count | Column % | Count | Column % | Count | Column % |
| Wireless Broadband | 48 | 41.7% | 459 | 59.3% | 89 | 72.4% | 7 | 87.5% |
| Wired Broadband | 67 | 58.3% | 315 | 40.7% | 34 | 27.6% | 1 | 12.5% |
| Total | 115 | 100.0% | 774 | 100.0% | 123 | 100.0% | 8 | 100.0% |

- As noticed from the tables' 4.40 and 4.41; it can be concluded that, it is not the 'activation time' but it is the 'frequency of the faults' which may lead to better 'customer satisfaction' which is aptly reflected in the table 4.41 above. 382

respondents out of 417 (91.6%) of the wired line broadband customers were satisfied (Highly satisfied + Satisfied), whereas 507 of the total 603 (84.1%) of the wireless customers were satisfied (Highly satisfied + Satisfied).

- It shows there is noticeable difference in the satisfaction of the customers as well in the number of satisfied broadband customers in both type of the broadband.
- It may be observed from above; there were differences in the services provided by the BSP's in case of wireless and wire line broadband. Also there exists the gaps in both the type of the services provided by the BSP's and in the expected services by the customers but comparatively larger 'service gaps' were there in case of wireless type of broadband if compared to wire line services showing overall the performance of the wireless broadband services delivered by the respective BSP's much below the performance of the wire line broadband and the services.

4. Switching over of customers and type of broadband (Wireless and Wire line)

- There are number of options available in 'broadband services' option available well of 'service providers', to broadband customers in India. Researcher wanted to know present switching trend in case of broadband. Following are the some of the observations based on the survey statistics as observations in Table 4.42.
- Out of total customers who were positively switching to another BSP (replied as 'Yes' in the table below), 74.2% were from wireless category and 25.8 were from wire line category. It shows more wireless customers were going to switch if compared with the customers from wire line category.
- In addition to above, 69.6% customers from wireless category and 30.4% from wire line category were 'planning to switch to another BSP's in coming future'. This is serious issue for wireless broadband service providers.

Table 4.42

Type of the broadband (wireless or wire line) and switching over of the broadband customers

| Are you planning to switch over to another Service Provider? | Type of broadband | | | | Row Total |
|--|--------------------|-------|-----------------|-------|-----------|
| | Wireless Broadband | | Wired Broadband | | |
| | Count | Row % | Count | Row % | |
| No | 258 | 48.3% | 276 | 51.7% | 534 |
| Yes | 112 | 74.2% | 39 | 25.8% | 164 |
| May be | 233 | 69.6% | 102 | 30.4% | 335 |
| Total | 603 | 59.1% | 417 | 40.9% | 1020 |

- From these two statements it is much clear that more customers from wireless category were switching over to another BSP as compared with wire line customers. It may be due to poor performance of wireless broadband services because it is seen in previous findings that the frequency of the faults is much more in case of the wireless broadband. As a result of this number of the wireless customers were affected badly due to frequent faults and were switching over to another BSP's in comparison to the customers of wire line.

5. Wireless broadband as an alternative: Need of the customers.

- Also, from previous findings and observations' it is clear that the wire line broadband services are much stable, reliable and of better quality as compared to wireless broadband services, even though out of total existing surveyed wire line customers 6.5% of the broadband customers using wireless broadband as an alternative to the wire line broadband in case of the wire line broadband fault. (Table 4.43)

Table 4.43

Wireless broadband as an alternative and customer preferences.

| Reason to prefer the wireless broadband as an alternative | Frequency | Percent |
|---|-----------|---------|
| No | 954 | 93.5 |
| Yes | 66 | 6.5 |
| Total | 1020 | 100.0 |

- This shows that 6.5% of the surveyed respondents need broadband in “always on condition” at all times for their day to day activities and don’t want any interruption or disconnection in it at any cost due to their important related work. Thus availability of the broadband at all times, its quality and reliability is the necessity of some of the present customers.

6. Frequency of broadband faults and Broadband Service providers.

- It is seen that the frequency of the faults is the serious cause behind dissatisfaction of the broadband customers. Also it is observed that the customers of the wireless technology were affected most due to frequent faults as compared to wire line customers, showing large differences in the services provided by BSP’s on wireless and wire line technologies. Hence there were differences in the satisfaction of the customers too. Researcher wanted to know service provider wise frequency of faults and the satisfaction of the customers.
- Table 4.44 shows that the percentage of the customers affected due to frequent faults was more with BSNL, Airtel and with Reliance and their percentage was 15.39%, 10.5% and 9.7% respectively. It is somewhat on lower side with Vodafone and Tata (6.4% and 7.7%).
- On the other hand of the total surveyed respondents; 16.27% and 5.78% customers of BSNL and Tata were enjoying fault free reliable services as

expected by the customers, whereas this percentage was comparatively low in case of Vodafone, Airtel and Reliance (2.3%, 3.9% and 3.8% respectively). This is due to the reason that BSNL and Tata were having higher percentage of the wire line broadband customer base, and were coming across comparatively less frequent faults as a result customers availing steady and fault free broadband services. (Table 4.6).

Table 4.44

Frequency of broadband faults (BSP wise)

| Broadband service provider | Frequency of broadband faults | | | | Total |
|----------------------------|-------------------------------|-------------------------|-------------------------|-------------|-------|
| | Very frequently | 2 to 4 times in a month | 4 to 6 times in a month | Very rarely | |
| Airtel | 19 | 74 | 15 | 40 | 148 |
| BSNL | 39 | 93 | 25 | 166 | 323 |
| Vodafone | 12 | 48 | 6 | 24 | 90 |
| Sify | 2 | 16 | 2 | 3 | 23 |
| Hathway | 0 | 5 | 0 | 6 | 11 |
| You Telecom | 2 | 10 | 0 | 5 | 17 |
| Tata Indicom | 22 | 58 | 19 | 59 | 158 |
| Reliance | 16 | 66 | 17 | 39 | 138 |
| Others | 12 | 44 | 15 | 41 | 112 |
| Total | 124 | 414 | 99 | 383 | 1020 |

- Thus overall, the customers of Vodafone, Airtel and Reliance were more affected due to frequent faults as compared to other BSP's, and the services provided were much below the expectations of customers.

7. Customers opinion about Quality of modem supplied

- The data presented in table 4.45 shows that 97.8% of the wireless customers said the Modem/USB Dongle supplied was of good quality and are satisfied about its performance.

- Only 2.2% said that the USB supplied was of poor quality. Whereas in case of wired line broadband 13.7% of the respondents did not have modem supplied by the BSP, but used their own.

Table 4.45

Modem/USB supplied by BSPs and opinion of broadband customers about its performance

| | | Type of broadband | | | | | |
|--|--------------|--------------------|----------|---------|-----------------|----------|---------|
| | | Wireless Broadband | | | Wired Broadband | | |
| | | Count | Column % | Table % | Count | Column % | Table % |
| Quality of the modem if supplied by the Service Provider | Excellent | 101 | 16.7% | 9.9% | 66 | 15.8% | 6.5% |
| | Good | 325 | 53.9% | 31.9% | 189 | 45.3% | 18.5% |
| | Satisfactory | 164 | 27.2% | 16.1% | 102 | 24.5% | 10.0% |
| | Poor | 13 | 2.2% | 1.3% | 3 | .7% | .3% |
| | Not Supplied | 0 | .0% | .0% | 57 | 13.7% | 5.6% |
| | Total | 603 | 100.0% | 59.1% | 417 | 100.0% | 40.9% |

- Remaining 86.3% of the wire line broadband users who are using modem supplied by respective BSP out of which 85.6% users are satisfied with the quality of the modem supplied and only 0.7% of wire line respondents were not satisfied due to poor quality and performance of the modem. This is a positive aspect that negligible percentages of the customers are dissatisfied due to poor quality of the Modem/USB supplied by BSP.

4.3. Gap Model of the study.

- It is observed from the findings of the study that there exist gaps in the broadband services provided. The overall broadband services delivered by the BSP's are below the expectations of the broadband customers. To know which specific broadband service areas in which BSP's fall short of services expected by the customers and where the BSP's have to focus more to minimize the gaps to meet the customer needs, wants and expectations. Researcher revisited the PZB gap model and tried to align the model w.r.t. this study.

Table 4.46

Table showing the SERVQUAL model and the corresponding Broadband service Gaps.

| Gap as defined by SERVQUAL Gap | | Broadband Service Gaps identified by researcher | | Sr. | Broadband Service Parameters designed by the researcher |
|--------------------------------|---|---|-----------------------------------|-----|--|
| Gap 1 | Consumer expectations-management perception Gap | BB Gap 1 | Not in the scope of this study. | - | Not in the scope of this study |
| Gap 2 | Service quality specification Gap | BB Gap 2 | Broadband Processes Gap | 1 | Initial broadband activation. |
| | | | | 2 | Fault booking process. |
| | | | | 3 | Ease of access to Customer Care Centre. |
| | | | | 4 | Process of resolution of usage/billing related complaints. |
| Gap 3 | Service delivery Gap | BB Gap 3 | Broadband Service Performance Gap | 1 | Expected broadband speed as per plan and actual speed delivered. |
| | | | | 2 | Download speed when in sharing with more than one computer. |
| | | | | 3 | Technical support from Service Provider. |
| | | | | 4 | Overall assistance from the service provider. |
| Gap 4 | External Communication Gap | BB Gap 4 | BSP's Communication Gap | 1 | Consistency in the promised upload & download speed. |
| | | | | 2 | Response given by the Customer Care Executive |
| | | | | 3 | Transparency in billing. |
| | | | | 4 | Co-ordination between customer care and technical staff. |
| Gap 5 | Service Quality Gap | BB Gap 5 | Customer Satisfaction Gap | 1 | Overall quality of broadband. |

- As stated earlier the researcher was interested to find out the gaps in broadband services by evaluating 'customer expectations' against the 'delivery of the services' by BSP's. Customer satisfaction in case of broadband services can be measured based on the service quality model 'SERVQUAL' by Parasuraman,

Zeithaml & Berry (1985) as this model is used by many other researchers to measure service quality and customer satisfaction in various service industries. The various gaps observed were compared with the corresponding gaps of the SERVQUAL model to find out the gaps in the broadband services.

- To know the expectations of broadband customers towards broadband; as like RATER dimensions, researcher identified total 13 parameters' of the broadband services (As per Table 4.46). The corresponding gaps of the model are:
 1. **BB Gap 1:** The corresponding 'Gap 1' from SERVQUAL model is not within the scope of the study as this study focuses on the understanding customer needs and expectations therefore survey of the customers was carried out and data from BSP's was not collected as it was thought be out of scope of this study.
 2. **BB Gap 2:** Gap between the Customers' expectations and Processes involved in delivery of broadband services. (Broadband Processes Gap).
 3. **BB Gap 3:** Gap between the Customers' expectations and the Performance of the BSP staff involved in the delivery of broadband services. (Broadband Performance Gap).
 4. **BB Gap 4:** Gap between the customers' expectations and BSP's communication to customers. (BSP's Communication Gap)
 5. **BB Gap 5:** Gap between the customers' expectations and the services delivery by BSP's. (Customer Satisfaction Gap).

A. Gap Analysis:

- The values of the mean for corresponding gaps from below table 4.47 show that there are significant differences in the services expected by the customers and the services delivered by the BSP's.

Table 4.47

Table showing Broadband services gaps and respective mean

| Broadband Service Gaps corresponding to SERVQUAL Gaps | Mean of Gap |
|---|-------------|
| BB Gap 2 | 3.245 |
| BB Gap 3 | 2.790 |
| BB Gap 4 | 4.747 |

1. **BB Gap 2: Broadband Processes Gap.**

- The mean value of ‘BB Gap 2’ was found to be 3.245, least amongst three gaps. It is the ‘Broadband Processes Gap’; the gap created due to mismatch between processes involved in delivering broadband services against expectations of the customers.
- BSP’s have focus on the broadband parameters (Sr. no. 1 to 4, shown against BB Gap 2; table 4.46) which are part of this gap and evaluate the reasons behind the gap, and accordingly plan for the processes improvements. BSP’s have to standardize the processes involved in the delivery of the broadband services and manage the resources effectively to reduce this gap.

2. **BB Gap 3: Broadband Service Performance Gap.**

- Table above shows that the mean value for this gap is 2.7902, higher than ‘BB Gap 2’ but lower than ‘BB Gap 4’. It is the Broadband Service Performance Gap, gap between services performances of the employees (people) involved in delivery of the broadband services against the expectations of the customers.
- BSP’s have to focus on this gap and corresponding broadband parameters (sr no. 1to4 shown against BB Gap 3; table 4.46) and try to improve the performance delivered in case of each broadband service parameter to minimize the gap and to match with expectations.

- Services are intangible and heterogeneous and cannot be separated; vary from person to person at all times at all levels of broadband service provisioning. BSP's should standardize the services delivery by the staff with behavioral training and performance analysis time to time. BSP's should evaluate the performance regularly on the basis standard techniques and feedback from customers to see how efficiently and effectively they are delivering broadband services, supporting & co-operating to customers at all service levels.

3. BB Gap 4: BSP's Communication Gap.

- This gap is largest from all the three gaps identified by the researcher w.r.t broadband services in this study having highest mean value of 4.7471 if compared with other two gaps, where the BSP's delivering broadband services much below the expectations of customers shows BSP's falls short while communicating with customers.
- BSP's have to plan strategies to reduce it by improvements in the broadband service areas (Sr. No.1to4, shown against BB Gap 4; from table 4.46) which forms this 'BB Gap 4'.
 - o Particularly by avoiding overpromising while communicating to customers and delivering as promised.
 - o Also by maintaining transparency in the billing which will build trust and long term association (Customer Loyalty).
 - o Discrepancy in bill should be avoided but if brought to the notice must be dealt with courtesy and the customer may be rewarded for the errors and omissions pointed out.

4. BB Gap 5: Customer Satisfaction Gap.

- 'BB Gap 5' is the overall gap of above three gaps. It had mean value of 3.594. It shows there also exists overall service gap between the services expected and the actual services delivered by the BSP's. The services delivered by all the BSP's irrespective of (wire line and wireless) are below the expectations of the broadband customers.

- Mainly BSP's have to plan the strategies to reduce all gaps but particularly should have more focus on 'BB Gap 4' and 'BB Gap 3', as these are bigger gaps in broadband services observed in this study.
- With these observations and findings, it is a challenge to BSP's to meet the needs and expectations of the broadband customers as these are changing continuously with time and technology. At every moment BSP's have to match service delivery with expectations of customers, for that BSP's has to undergo customer feedback and performance evaluation periodically to enhance 'overall quality of broadband'.
- As observed in this study 3P's of the services marketing plays important role on delivery of broadband services. Especially BSP's have to focus on improvement in performance of People, Processes, Services cape. Also plan for better Physical evidences along with better 'network coverage' and 'network quality and reliability' of the broadband services.
- It will help BSP's to improve overall services quality, which ultimately will result in to overall customer satisfaction of broadband customers by matching with the needs and expectations of the broadband customers. The recommendations and suggestions based on the findings of this study summarized in the next topic 'Recommendations'.