

<u>ISSN:</u> <u>2278 – 0211 (Online)</u>

A Study Of The Consumer Behaviorconcerning Internet Brodbandamenity In North Gujarat Specific To Mehsana

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Abstract:

The Internet is the network of networks around the world. It is made up of thousands of smaller, national, regional, governmental, academic and commercial networks. It is a global network. Information can be communicated from one city (or country) to another through Internet. You can access information all over the work. More than two billion people around the world use the Internet daily for different purposes. For example, to communicate with other people around the world, access information and latest news around the world etc. The computers are the main components through which information can be electronically sent and received from one location to another. For this purpose, a special device called modem is also used with computer and then computer is attached with the telephone line. The modem sends and receives the information over telephone lines. You must have an Internet connection of any local ISP (Internet Service Provider) to share the information on Internet. The telephone lines, fiber-optic cables, satellite communications are the main media of communications that are used to connect to the Internet. Today Internet is a global web of nearly one million computer networks. Internet host computers are connected to the Internet round the clockThis study mainly focuses in the consumer behavior and their perception on the internet broadband service provider. It makes the analysis of the antecedents of customer satisfaction and loyalty. Internet also made an impact in almost every field. There are a number of Internet Service Providers providing Internet services throughout the country, however the customer are chosen based one of the quality of service, high-speed and the cost effectiveness and connectivity service. The various services and products on offer by these various internet service providers in India are quite accommodating and flexible and also make sure that customer satisfaction is achieved.

1.Introduction

The Internet was started in 1969 by the defense department of USA. Later, it was handed over to the Defense Advanced Research Projects Agency (DARPA). The DARPA launched the first Internet program. The DARPA established a network of 4 computers and named as ARPANet. The protocols (Software) that define the rules to exchange information between computers were created by DARPA.

The idea of computer networking soon became popular. Several universities & research organizations developed their own computer networks. They joined their networks to ARPANet. The ARPANet became the network of networks. This network of computer networks was named as Internet.

In 1986 the National Science Foundation (NSF), another federal agency of USA, established a network and named as NSFNetS. It was established for academic purpose and was accessible to everyone. Later, it was expanded all over the country and large number of universities and research centers were connected to this network. The academic networks were established and all these were interconnected together to share the information. The way of connecting one network to another is termed as internetworking and "Internet" is also derived from internetworking. The NSF provided the connections for academic research centers only. After this many telecommunication companies established their own network backbones by using the same networking protocol as NSFNet used and also provided connections to private users. In 1995, NSF terminated its network on the Internet. Today, the Internet consists of many local, regional, national and international networks.

2.An Introduction To Broadband Internet

The Internet, and more so the broadband Internet, have revolutionized the way we live and work as never before. It has opened up undreamt of possibilities; its potential for more new possibilities is growing at unprecedented speed. You could never have imagined that a cardiovascular surgery could be conducted under live video supervision and guidance of a surgeon sitting in a far off place. Or, in the foreign exchange capital market, transaction of sale and purchase of important currencies worth billions and trillions of dollars daily could take place in a matter of seconds. Such examples can be multiplied to no end. All this has become possible with the advent of broadband Internet. Broadband Internet is like a wide highway that allows for speedy and smooth traffic for thousands of vehicles running in many directions round the clock. Broadband internet has been facilitated by satellite transmission of data. This kind of transmission allows many modes of communication. You can transfer your data containing lengthy files of texts, photographs, music, video, audio, graphics and different kinds of pictures. You can also make instant financial transactions, or just exchange pleasantries. Broadband facilitates all this through encryption and decryption techniques, which secure your privacy.

Compare broadband Internet and dialup modem connections and you will quickly see how slow the dialup paradigm is. Imagine uploading a long e-book or a Photoshop file with a dialup modem connection. It takes ages, as it were. An ordinary music file that can be transferred in seconds through broadband Internet takes many minutes via a dialup modem connection. Broadband Internet enables you to transfer your data 10 to 20 times faster. Through broadband Internet the data can be transferred in the speed range of 256Kb/sec to 10Kb/sec. The transmission takes place instantaneously at the click of the mouse.

As if that wasn't enough, the speed at which new technologies are being inducted into the field of broadband Internet will make it more useful than ever before.

3. The Status Of Broadband Connectivity

There are more than 1 billion broadband subscriptions globally. In September 2009, there were over 465 million fixed broadband subscribers—nearly three times the number in December 2004.3 There were also more than 575 million wireless high-speed data subscriptions—almost 20 times as many as in December 2004.4 Pyramid Research forecasts that by 2013 the number of broadband subscriptions (both wireline and wireless) will exceed 3 billion as today's narrowband networks are upgraded to broadband.5 Some countries, such as Singapore, already have a combined fixed and mobile broadband penetration rate in excess of 100 per 100 inhabitant.



Figure 1: Over view

Broadband is often called "high-speed" access to the Internet, because it usually has a high rate of data transmission. In general, any connection to the customer of 256 kbit/s (0.25 Mbit/s) or greater is more concisely considered broadband Internet access. The International Telecommunication Union Standardization (ITU-T) Sector recommendation I.113 has defined broadband as a transmission capacity that is faster than primary rate ISDN, at 1.5 to 2 Mbit/s. The FCC definition of broadband is 4.0 Mbit/s. The Organization for Economic Co-operation and Development (OECD) has defined broadband as 256 kbit/s in at least one direction and this bit rate is the most common baseline that is marketed as "broadband" around the world. There is no specific bitrate defined by the industry, however, and "broadband" can mean lower-bitrate transmission methods. Some Internet Service Providers (ISPs) use this to their advantage in marketing lower-bitrate connections as broadband.



Figure 2 (Source: google.com)

In practice, the advertised maximum bandwidth is not always reliably available to the customer; physical link quality can vary, and ISPs (Internet Service Providers) usually allow a greater number of subscribers than their backbone connection or neighborhoodaccess network can handle, under the assumption that most users will not be using their full connection capacity very frequently. This aggregation strategy (known as a contended service) works more often than not, so users can typically burst to their full bandwidth most of the time; however, peer-to-peer (P2P) file sharing systems, often requiring extended durations of high bandwidth usage, violate these assumptions, and can cause major problems for ISPs. In some cases the contention ratio, or a download cap, is agreed in the contract, and businesses and other customers, who need a lower contention ratio or even an uncontended service, are typically charged more.

When traffic is particularly heavy, the ISP can deliberately throttle back user's traffic, or just some kinds of traffic. This is known as traffic shaping. Careful use of traffic shaping by the network provider can ensure quality of service for time critical services even on extremely busy networks, but overuse can lead to concerns of network neutrality if certain types of traffic are severely or completely blocked.

As takeup for these introductory products increases, telcos are starting to offer higher bit rate services. For existing connections, this most of the time simply involves reconfiguring the existing equipment at each end of the connection.



Figure 3 (Source: google.com)

List of countries by number of Internet users, English on the Internet, Global Internet usage, and Unicode. The prevalent language for communication on the Internet has been English. This may be a result of the origin of the Internet, as well as the language's role as a lingua franca. Early computer systems were limited to the characters in the American Standard Code for Information Interchange(ASCII), a subset of the Latin alphabet.

After English (27%), the most requested languages on the World Wide Web are Chinese (23%), Spanish (8%), Japanese (5%), Portuguese and German (4% each), Arabic, French and Russian (3% each), and Korean (2%).^[24] By region, 42% of the world's Internet users are based in Asia, 24% in Europe, 14% in North America, 10% in Latin America and the Caribbean taken together, 6% Africa, 3% in the Middle East and 1% in Australia/Oceania.^[25] The Internet's technologies have developed enough in recent years, especially in the use of Unicode, that good facilities are available for development and communication in the world's widely used languages. However, some glitches such as mojibake (incorrect display of some languages' characters) still remain. Common methods of Internet access in homes include dial-up, landline broadband (over coaxial cable, fiber optic or copper wires), Wi-Fi, satellite and 3G/4G technology cell phones.

Public places to use the Internet include libraries and Internet cafes, where computers with Internet connections are available. There are also Internet access points in many public places such as airport halls and coffee shops, in some cases just for brief use while standing. Various terms are used, such as "public Internet kiosk", "public access terminal", and "Web payphone". Many hotels now also have public terminals, though these are usually fee-based. These terminals are widely accessed for various usages like ticket booking, bank deposit, online payment etc. Wi-Fi provides wireless access to computer networks, and therefore can do so to the Internet itself. Hotspots providing such access include Wi-Fi cafes, where would-be users need to bring their own wirelessenabled devices such as a laptop or PDA. These services may be free to all, free to customers only, or fee-based. A hotspot need not be limited to a confined location. A whole campus or park, or even an entire city can be enabled. Grassroots efforts have led to wireless community networks. Commercial Wi-Fi services covering large city areas are in place in London, Vienna, Toronto, San Francisco, Philadelphia, Chicago and Pittsburgh. The Internet can then be accessed from such places as a park bench.^[26] Apart from Wi-Fi, there have been experiments with proprietary mobile wireless networks like Ricochet, various high-speed data services over cellular phone networks, and fixed wireless

4.India & The Internet

Inside India, things do seem to be improving. Five years ago there was limited Internet access but only in a few major cities, all in the hands of the government. VSNL, the agency responsible for Internet activities, and the DOT (Department of Telecommunications) provided an agonizingly erratic connectivity, with miserly bandwidth and far too few phone lines. Connection rates ran as low as 5% (for every 20 dialups you might get connected once) and users were frequently cut off. And the rates for this pathetic level of service were among the highest in the world. Domestic users paid about \$2 per hour, and lease lines, for the few companies that could afford them, ranged over \$2000 per month for a 64 Cobs line. By the end of 1998, after three years of government monopoly, there were barely 150,000 Internet connections in India.

Today (midyear 2000) the government monopoly is largely over. Dozens of small to large Internet Service Providers have set up shop, triggering a price war and an improvement of service. Users are now estimated at over 2 million, with a growth predicted to reach 50 million in the next five years. Small Internet kiosks have set up even in small towns, and the governments, both State and Central are pushing for growth in the Internet sector. Internet is the new buzzword. The many small tutorial colleges that pushed computer software courses of variable quality are now in a hard sell scramble to push Net related content. The Internet represents the new wealth frontier for the middle classes - a good salary and a clean job, and for a few, the chance to go abroad Some researchers have indicated that there is a "tipping point" at which the penetration rate of broadband services within a nation becomes large enough to begin to rapidly influence all sectors in a significant and highly productive way. Mandating universal access to broadband identifies that goal, at least, while practical ways are developed to connect to the last mile and the last community and household. Whether or not broadband access to the Internet is considered a universal service, however,

5.Broadband Future

It is clear that its expansion to as much of the population as possible has enormous potential to sustain and improve social and economic benefits across the board. Nevertheless, more research is required on sustainable business models for infrastructure and services, especially in relation to developing countries. This will include further examination of the economic impact of broadband across all sectors, as well as its social effects. The Broadband Commission's online repository of case studies, recommendations and research materials (www.broadbandcommission.org/sharehouse) will continue to be an interactive resource that is aimed at becoming he focus of such research for the future of broadband

The List of The Top10 Broadband Providers in India:

- BSNL
- MTNL
- AIRTEL Broadband
- The Hathway Cable Broadband
- Tata Broadband
- Reliance Broadband
- You Broadband
- Sify Broadband
- AsianetDataline Broadband
- HFCL Infotel Connect

6.Literature Review

Measuring Customer Attitude towards Broadband Services

Early studies on impacts of broadband computer networks on society mainly focus on offering expert opinions, forecasting future trends, and speculating about the potential of the technology. More recent studies attempted to assess the penetration rate of broadband by focusing on specific types of applications requiring high speed (Chang, Lee, & Middleton, 2004; Cohill, 2005a, 2005b; Lee, O'Keefe, & Yun, 2003). These studies also attempted to quantify the subscriber volume, which stands for the number and percent of customers purchasing the service. The studies have typically covered the "private sector business case" for broadband deployment and investments (Chang et al., 2004; Cohill, 2005a, 2005b; Lee et al., 2003). This has been especially the case in the United States where there is little public investment in the technology (NBUBRC, 2006). Other studies went further in studying the business case by attempting to provide quantitative elements on either the return on investment in broadband infrastructure or the economic outcomes of subscribing to or using broadband technology. In other words, these studies attempted to assess either how much economic activity and further investment can be attributed to broadband expenses or how much savings have been achieved, how many jobs have been created, and so on. These attempts have faced challenges with data collection. Another major challenge was the issue of isolating the quantifiable impacts or changes that can be assigned specifically to broadband usage from those which are caused by other factors (Marlin & Bruce, 2006; N

BUBRC, 2006). Shaw et al, (2005) revealed that, a positive attitude doesn't essentially result to the wished behaviour.

2011, 01). Literature Review on Customer Attitude Towards Broadband Services.StudyMode.com.Retrieved01,2011,fromhttp://www.studymode.com/essays/Literature-Review-On-Customer-Attitude-Towards-544627.html

Customer expectations and perceived quality are expected to positively influence perceived value and customer satisfaction. The customer satisfaction ultimately leads to repurchase likelihood, price tolerance and customer complaints. While the effect of customer satisfaction on repurchase likelihood and positive, customer satisfaction leads to reduced customer complaints thus suggesting negative association between the two constructs. The customer expectation includes the prior experience with the service provider and the expectation of future performance. Perceived quality is the measure of recent service usage experience and consists of two components namely perceived product quality and perceived service quality. Perceived value accounts in price and is referred to as perception of quality for money these three constructs lead to customer satisfaction which measures the customer's reaction to the actual and value against the service expectations. Customer satisfaction in turn leads to customer loyalty which is measured as two independent constructs such as repurchase likelihood and price tolerance. The two constructs represent the financial and quality measures of loyalty the model also includes customer complaints that represent the 'voice of customers' and measured as the voice percentage of respondents who reported problems with the service within a specified time frame.

7.Research Methodology

In planning and designing a specific research project, it is necessary to anticipate all the steps that have to be undertaken to make the project successful. Our research process consists of following steps:

7.1.Need For The Study

- To determine the customer behavior towered the internet broadband service industry.
- To identify global opportunities to the expansions of internet broadband service industry.

7.2. Hypothesis For The Study

- The high-speed and the cost effectiveness and connectivity service is the major factor responsible for choosing the service.
- 80% of the people are aware about the internet.
- 70% of the users are part from younger group.
- Income level of customer affects on the use of the internet service
- Customer satisfaction has a positive impact on price tolerance of internet broadband service.

8.Formulating The Research Objective

8.1.

The first step of any research is to formulate the research objective. The research objective is defined as "a study of the consumer behavior regarding internet broadband service in mehsana city"

8.2. Secondary Objectives

- To find out the factors that affecting on the customer buying behavior regarding internet broadband service.
- To evaluate the comparative strength of these factors in buying decision of the buyers.
- To measures the customers' reaction to the actual service usage and value against the service expectations.
- To analysis of the customer perceived service quality, and the customer satisfaction.
- To study the awareness level of internet usage in the mehsana city.

8.3.Beneficiaries

- Dealer.
- Retailer.
- Entrepreneurs...
- Customer.
- Students.

8.4.Sampling Design

I will be using a Non Probability sampling method where in the concept of judgment sampling. In the sampling method that we can know the respondents' to judgment where they are use or not the internet broadband service

8.4.1.<u>Sampling Design Steps</u>

8.4.2.1.Relevant population out of Universe

Our population consists of all the age group people in the mehsana city.

8.4.2.2.Sample Size

The calculation of the sample size proceeds as under:-

For 95% Confidence level, z=1.96.

From a pilot survey of 20 respondents. It was found that 80% percent of the aware about the internet broadband service

So, p = 0.80 & q = 1 - p = 0.20

So, pq = 0.16

= measure of the sample dispersion.

Standard error $\sigma_p = 0.1/1.96 = 0.05$

$$n = \underline{Z^2 \sigma^2}$$

 e^2

Here Z = value determined from Z table for a confidence level σ^2 = Variance e^2 = Error specification

Putting these in the formula we get,

n =
$$(1.96)^2(0.16)$$

(0.05)²
n = $3.8416 * 0.16$ = 245.856
.0025

Therefore, approx. sample size was taken as 250.

8.5.Research Design

8.5.1. Method Of Data Collection

I have used the interrogation/communications study where the researcher questions the

by personal means.

I have used two main sources of data:

8.5.1.1.Primary Source

Questionnaires

8.5.1.2. Secondary Source

- Books
- Internet
- Articles from newspapers
- Magazines.

9. Analyses And Interpretation

9.1.Question (1)

Your Income level?

- (A) Below 10,000
- (B) 10,001-15,000
- (C) 15,001-20,000
- (D) 20,001-25,000
- (E) 25,001-30,000
- (F) Above-30,001
- (G) None of This



Figure 4

9.1.1.Interpretation

As per our survey, we found out that 52 % of the respondents are the not generated the income because they are not business man or self employed person they are student, we can seek that income level not much more infusing the usage of the internet. It can relate on the requirement on the internet service.

9.2.Question (2)

You're Age?

- (A) Below 20
- (B) 20-25
- (C) 25-30
- (D) 30-35
- (E) 35-40
- (F) Above 40





9.2.1.Interpretation

We found that most of respondents are belongs to the younger group on age between 20-25 TO 30-35 in 25%,23%,19% total (67%) so we can say that usage of the internet are depend on the younger group people .and less on the below the 20 or the above the 40 age.

9.3.Question (3)

Education & Qualification?

- (A)Under Graduate
- (B) Graduate
- (C) Post Graduate
- (D) Professional Degree Holder





Figure 6

9.3.1.Interpretation

As per our survey, I found that 28% are under graduate and most of respondent are belong to the graduate 37%, post graduate, and 11% are in Professional Degree Holder 11%, 2% are other.

9.4. Question (4)

How much you are aware about the INTERNET?

- (A) Very High
- (B) High
- (C) Average
- (D) Low
- (E) Very Low



Figure 7

9.4.1.Interpretation

As per our survey, we can seek that 21% respondent are highly aware, 67% are average and 12% are low aware about the internet broadband service.

9.5.*Question* (5)

You are Using INTERNETservice on,

- (A) Daily
- (B) Weekly
- (C) Monthly
- (D) when you're Requirement



Figure 8

9.5.1.Interpretation

As per research, We found that 43% of the respondents are use internet ion the weekly 26% are use daily ,17% are monthly , 14% are respondents are use when there requirement to use the internet

9.6.*Question* (6)

Since how long period of time you are using INTERNET BROADBAND service?

- (A) Last 6 month
- (B) 6-12 month

- (E) 3 4 year
- (F) 4 5 year
- (C) 1 2 year (G) More that
- (D) 2 3 year

(G) More than last 5 year



Figure 9

9.6.1.Interpretation

Internet users are mostly in between the 6-12 menthe to the 2-3 year. And the 11% in the last 6 month, 13% on the 3-4 year, 11% on the 4-6 year, 7% are people use internet on the more than the last 5 year

9.7.Question (7)

Why you are using INTERNET? (Just tick mark.)

- (A) For Getting Information
- (B) Entertainment
- (C) For The Research Purpose
- (D) Networking
- (E) Advertisement
- (F) Other _____



Figure 10

9.7.1.Interpretation

Purpose of the usage of the internet are mostly for the getting the information as 34% and the second in the networking 21% to connecting the friends & family ,17% are entertainment , 14% are for the research purpose ,6% are advertisements ,8% make the other purpose

9.8.*Question* (8)

Which INTERNET Facility are you using? (Just tick mark.)

- (A) Net-Banking
- (B) Internet Trading
- (C) Internet Chatting
- (D) Online Reservation
- (E) Terminal (Stock Market)
- (F) Online application
- (G) Other _____



Figure 11

9.8.1.Interpretation

As per our survey most of the respondents want to use internet to net-banking 21%, second is 19% terminal (stock market), 17% are internet trading E-shopping, 13% on internet chatting, 10% on online application, 8% other purpose to usage the internet facility.

9.9.*Question* (9)

Which type of access are you using? (Just tick mark.)

(A)Wireless ISP

- (B) Cable Broadband
- (C) Cellular Broadband (GPRS)
- (D) Other : -_____



Figure 12

9.9.1.Interpretation

As per our survey most of the people are prefer to use the wireless ISP on 43%, second large is the cellular broadband (GPRS), 21% people prefer to use cabal broadband access instruments.

9.10.Question (10)

Which INTERNET BROADBAND Service Providers are You Use?

- (A) BSNL Broadband
- (B) Airtel Broadband
- (C) Reliance Broadband
- (D) Tata Indicom Broadband
- (E) Idea broadband
- (F) Zee next
- (G) MTNL Broadband
- (H) Other : _____



Figure 13

9.10.1.Interpretation

According to this information consumer preference to the BSNL on 43%, 14% on the Reliance, 12% on the Tatsindicom, 10% on Idea, 8% on Airtel, MTNL 6%, other 6% (Aircel, VodaponUninor_)Internet broadband service providers

9.11.Question (11)

Have you inquired any sources before the Purchas the INTERNET BROADBAND?



Figure 14

9.11.1.Interpretation

When the customer wants to the purchase the internet broadband service at that time they can inquired the source on the 88%, and they can't inquired any resource on the 12%

9.12.Question (12)

If YES, Which Source you have inquired?

- (A) Newspaper
- (B) T.V
- (C) Posters
- (D) Friends and Colleagues
- (E) Magazines Book
- (F) Internet



Figure 15

9.12.1.Interpretation

When the customer want to inquired or go to the market source they can mostly prefer the friend & family ,colleagues on the 27%, news paper aer23%, 11% on the T.V ,posters on 13\%, magazines book 18\%, internet 8\%

9.13.Question (13)

If No, Why?

- (A) I have no enough time to make the inquiring.
- (B) I always follow the internet user suggestion. Who are already using it?
- (C) I always follow the friends & family recommendation.
- (D) Any other then please specify _____



Figure 16

9.13.1.Interpretation

When the customer will not want to make any inquired or goes to the market source because they can always follow the internet user suggestion. Who are already using it on 63%; they are always following the friends & family recommendation on the 34%, other facto infusing on the3%

9.14.Question (14)

Do you think you are getting the perceived service quality, which you are expected to the existing INTERNET BROADBAND Service Providers (company)?



Figure 17

9.14.1.Interpretation

As per research, we can seek that 37% respondents are satisfied that they can get perceived service quality, which they are expected to the existing INTERNET BROADBAND Service Providers. And 63% respondents are not satisfied.

9.15.Question (15)

What is your satisfaction level with CRITERIA, That you consider to The Basis Points 1 = strongly Disagree, 5 = strongly Agree

CRITERIA	S.D	D	N.D / N.A	Α	S.A
HIGH SPEED	1	2	3	4	5
PRICE TOLERATION	1	2	3	4	5
CHARGESH	1	2	3	4	5
CONNECTIVITY	1	2	3	4	5
PROMOTIONAL	1	2	3	4	5
SCHEMES					

Table 1



Figure 18

9.15.1.Interpretation

As Per Research, We Can Seek That Respondents Are Satisfied Level With The Criteria. That You Consider To The Basis Points 1 = Strongly Disagree, 5 = Strongly Agree The Criteria High Speed, Price Toleration, Charges, and Connectivity . Promotional Schemes Most Of The Respondents Are N.D/N.A Not Agree ,Not Disagree , High Speed 57% ,Price Toleration 58%, Charges 66%, Connectivity 53%. Promotional Schemes 54%.Disagree, Or Not Satisfied Respondent High Speed 17%, Price Toleration 23%, Charges 28%, Connectivity21% . Promotional Schemes 26% Agree Or Satisfied Respondent High Speed 23%, Price Toleration15%, Charges 4%, Connectivity22% . Promotional Schemes 18% And The Strongly Agree Are In the only On High Speed 3%Strongly Disagree People Are in the Price Toleration 4%, Charges 2%, and Promotional Schemes 2%

9.16.Question (16)

Do you think you may shift to any other internet service provider in future?



Figure 19

9.16.1.Interpretation

As per research,79% respond are not satisfied the service which is the internet service provider can provide .they may shift to any other internet service provider who are provide the better servicer and affordable price to the respondents , and 21% customer are satisfied the service which is provided by the internet company

9.17.Question (17)

If yes, which factors might lead you to shift some other internet service provider?

- (A) High speed
- (B) price toleration
- (C) charges
- (D) connectivity
- (E) Promotional schemes
- (F) Any other then please specify



Figure 20

9.17.1.Interpretation

As per research, that price toleration FACTOR IS THE MOSTLY AFFECTIN TO THE SIFT TO THE OTHER SERVICE PROVIDERIN 31%, High speed 9% charges 28%, connectivity 12% Promotional schemes 18% AND THE OTHER 2%,

10.Chi Square TEST

10.1.(TEST 1)

INCOME	DAILY	WEEKLY	MONTHELY	WHEN YOUR REOUIEMETN	TOTAL
Low	8	11	11	8	38
Medium	16	11	11	9	47
High	17	10	5	3	35
Non Fo This	24	76	15	15	130
Total	65	108	42	35	250

Table 2: Chi Square Test between income level & use of the internet service(Que 1 and Que 5)

H0: Income and internet usage are not related.

H1: income and internet usage are related.

To calculate the expected value I should apply formula as

(Row Total*Column Total0)/Grand Total

 $(r-1)^*(c-1) = (4-1)^*(4-1) = 6$

Observation	Observed Value	Expected Value	X2 = (O- E)2/E
(A)daily	8	38*65/250=9.88	(8-9.88)2/9.88=0.35
Weekly	11	38*108/250=16.42	(11-16.42)2/16.42=1.79
Monthly	11	38*42/250=6.38	(11-6.38)2/6.38=2.76
When requirement	8	38*35/250=5.32	(8-5.32)2/5.32=0.42
(B)daily	16	47*65/250=12.22	(16-12.22)2/12.22=1.17
Weekly	11	47*108/250=20.30	(11-20.3)2/20.3=4.26
Monthly	11	47*42/250=7.89	(11-7.89)2/7.89=1.22
When requirement	9	47*35/250=6.58	(9-6.58)2/6.58=0.89
(C)daily	17	35*65/250=9.1	(17-9.1)2/9.1=6.85
Weekly	10	35*108/250=15.12	(10-15.12)2/15.12=1.73
Monthly	5	35*42/250=5.88	(5-5.88)2/5.88=0.13
When requirement	3	35*35/250=4.9	(3-4.9)2/4.9 /=0.74
(D)daily	24	130*65/250=26.78	(24-26.78-)2/26.78=0.29
Weekly	76	130*108/250=56.16	(76-56.16)2/56.16=7.00
Monthly	15	130*42/250=21.84	(15-21.84)2/21.84=2.14
When requirement	15	130*35/250=18.2	(15-18.2)2/18.2=0.56
			32.3

Table 3 Total X2 =32.3

The Critical Value of X2 2 DF at 5% level is12.60.As the calculated value of X2 is greater than critical value, H0 is rejected.H1 is accepted. There is relationship income and internet usage are related

10.2.(TEST= 2)

Chi Square Test between customer satisfaction level and switching behave with the factor or Customers may Shift or not to Other Provider & the Factor Might Be Affecting to shift Use of the Internet Service

Factoe	Yes	No	Total
High Speed	17	5	22
Price Toleration	66	12	78
Charges	55	15	70
Connectivity	18	12	30
Promotional	39	6	45
Schemes			
Other	3	2	5
	198	52	250

Table 4: (Que 16 and Que 17)

H0: customer satisfaction level and switching behavior with factor are not related.

H1: customer satisfaction level and switching behavior with factor are related.

To calculate the expected value I should apply formula as

(Row Total*Column Total0)/Grand Total

 $(r-1)^*(c-1) = (6-1)^*(2-1) = 5$

	Observed Value		
Observation		Expected	$\mathbf{X2} = (\mathbf{OE})2/\mathbf{E}$
		Value	
YES	17	22*198/250=17.42	(17-17.42)2/17.42=.010
NO	5	22*52/250=4.56	(5-4.6)2/4.6=.035
YES	66	78*198/250=61.77	(66-61.77)2/61.771.=1.62
NO	12	78*52/250=16.22	(12-16.22)2/16.22=1.09
YES	55	70*198/250=55.44	(55-55.44)2/55.44=3.49
NO	15	70*52/250=14.56	(15-14.56)2/14.56=0.013

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	Observed Value		
Observation		Expected	$\mathbf{X2} = (\mathbf{OE})2/\mathbf{E}$
		Value	
YES	18	30*198/250=23.76	(18-23.76)2/23.76=1.40
NO	12	30*52/250=6.24	(12-6.24)2/6.24=4.84
YES	39	45*198/250=35.64	(39-35.64)2/35.64=.32
NO	6	45*52/250=9.36	(6-9.36)2/9.36=1.2
YES	3	5*198/250=3.96	(3-3.96)2/3.96=0.23
NO	2	5*52/250=1.04	(2-1.04)2/1.04=0.89
Total			14.73

Table 5

Total X2 =14.736

The Critical Value of X2 2 DF at 5% level is 11.07.As the calculated value of X2 is greater than critical value, H0 is rejected.H1 is accepted. customer satisfaction level and switching behavior with factor are related.

10.3.Finding

- Income level of the customer not much more effect on the usage of the internet service
- Most of the user belong to the younger group as on the below 20 to 30-35,
- Most of the graduate people highly aware about the internet and use the internet on the weekly on 65%
- Internet user main purpose are gathering information networking and entertainments
- Most of prefer the wireless ISP access internet
- 88% of respond want to make the inquire of the recourse before the purchasing the internet broadband and mainly the prefers the news paper, friend colleges and magazine book
- When the other are not make the inquire because the can always follow the internet user suggestion. Who all ready use it and follow the friend and family recommendation
- Price toleration and charges are the mainly factor to satisfaction to the respondent.

• 79% of respondent want make shift to other service provider in future because of changing the price sensitivity and charges if low cost of service

10.4.Suggestions

- As it is clear from the above research analysis that the internet broadband company needs to focus on the improving the marketing strategy they should make their advertisement in such a way that the awareness and the usage of the the internet service are increasing.
- Price toleration factor is the mostly affecting to the sift to the other service provider in 31%, high speed 9% charges 28%, connectivity 12% promotional schemes 18% and the other 2%,
- Internet broadband company makes to controlling over the price sensitivity charges and provides the better connectivity. So they can improve the customer satisfaction level and to decrees the customer turnover ratio.

10.5.Limitations

- We have to assume that all the respondents have provided correct information.
- The survey size is only 250 individuals. From this sample size we have to assume the results for the whole population.
- lack of accurate sources of data
- Time constraint.
- resource constraint

11.Conclusion

From the above result and finding we can conclude that most of the respondents are aware about the internet service. So the internet service provider company may capthere the maximum number of the market to improving the better marketing strategy. The internet users are not extremely satisfied with companies who already providing the service so companies have to focus on their customer requirement.

12.Reference

- 1. www.oii.ox.ac.uk/research/projects/?id=29
- 2. www.rand.org/content/dam/rand/pubs/issue_papers/2005/IP240.pdf
- 3. www.forumonpublicdomain.ca/sites/...ca/files/ramirez_paper.pdf
- 4. www.juniperresearch.com/.../whitepaper
- 5. net.educause.edu/ir/library/pdf/epo0801.pdf
- 6. deas.repec.org/p/sip/dpaper/09-008.html
- 7. www.net4.in/
- 8. www.sahglobal.com/our.../quick-facts-broadband-internet-access/
- 9. internetinnovation.org/factbook/ United States
- 10. http://www.itfacts.biz/8917-mln-will-be-earned-on-fiber-optic-test-equipment-by-2013/8999
- 11. www.internet-service.co.in/Gujarat
- 12. visual.ly/broadband-internet-speeds-fun-facts-figures
- 13. people.eng.unimelb.edu.au/rtucker/publications/files/tja10043.pdf
- 14. www.itu.int/ITU-D/ict/facts/2011/material/ICTFactsFigures2011.pdf
- 15. openinternet.ideascale.com/a/dtd/...Broadband-Facts.../18040-6017
- 16. www.internet broadband .com
- 17. www.indiainfoline.com
- 18. www.broadbandcommission.org