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CUSTOMER PERCEPTION TOWARDS INTERNET SERVICE PROVIDERS (ISP) IN COIMBATORE CITY

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Abstract

The emergence of internet is one of the hallmarks of the revolution triggered by the networking technology. Computer had its origin in the late 1940's. Originally computers were considered as machines meant exclusively for doing calculations. But now they are being widely used for a number of wide and varied applications, ranging from communicating to each other from remote corners of the world to gathering information, downloading software and even playing games. As the number of networks grew, computer networks located in different places were connected to each other to form larger networks. Computers spread their 'net' across the world and thus emerged the era of the internet. Internet has proved to be the single most significant phenomenon offering never ending opportunities. Several educational institutions, organizations and business houses have established their own sites on the internet. The study highlights the attitude of customers towards internet and their preference towards the choice of internet services. Statistical tools like percentage analysis, chi-square analysis and weighted average score analysis were applied and findings were used to offer suggestions.

Key words: *Internet Service Providers (ISPs), Customer Perception, Weighted Average Score Analysis.*

JEL CODE: D11, D12, L86, M31

1. INTRODUCTION

In today's world, network system plays a vital role in business communication and in other fields also. Internet Services were launched in India on 15th August, 1995 by Videsh Sanchar Nigam Limited. In Nov, 1998 the Government opened up the sector for providing internet services by private operators and agreed to interconnect with each other and ex change packets. Many of the large ISPs sell connections to their network to smaller ISPs, some of whom again sell connections to other operators. T here

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is no central "Internet Inc," to which the user can connect. Essentially, it is a collection of Internet Service Providers (ISPs) who operate their own networks, with their own client ISPs. Ultimately, these ISPs at all levels sell connections to individuals and corporations, who then merge their networks (or individual computers) into this larger network called the Internet. This system of internet plays a vital role in this modern era.

2. INTERNET SERVICE PROVIDERS AND THEIR SERVICES – AN OVERVIEW

The internet service providers such as Bharat Sanchar Nigam Ltd, Mahanagar Telephone Nigam Ltd, Reliance Communications Ltd, Tata Teleservices Ltd and Bharti Airtel Ltd are the top five internet service providers. They render their services to the customers in many ways such as e-mail, net telephony and world wide web. Internet Relay Chat (IRC) is a program that allows users to carry out text-based conversations through the internet. The File Transfer Facility (FTP) is the other service provided to customers, which helps to transfer the files from one computer to another. Through internet, users can log in to a remote computer system and work on that system as if they are working in their own local system. Thus working on remote computers is made possible through client programs such as Telnet, Gophere and Veronica. These facilities, available on the internet, are provided by the Internet Service Providers (ISP).

3. REVIEW OF LITERATURE

There are a number of research studies on internet service providers and some of them have focused on the services provided by ISPs and their performance. An attempt has been made here to review the previous studies.

Siriginidi Subba Rao, (2000), in his review entitled, "Internet service providers: an Indian scenario", explained that ISPs are grappling with value-added services. The study reveals that the ISP business has potential for high returns on investment but with high risk factors of competitiveness, invasion of new internet technologies, connectivity issues, etc. **Adeogun (2003),** in his study, "The digital divide and university education in Sub-Saharan Africa", reported that the convergence of computers and telecommunication technologies has made possible activities which were considered impossible in the past. The study found that universities in developing countries are now providing a platform to locate, download and share world knowledge and learning materials. **Ojedokun and Owolabi (2003),** in the article entitled, "internet access competence and the use of internet for teaching", has pointed out that lecturers perceive the internet to be useful for research and teaching rather than the old method of teaching. The findings reveal that libraries provide cheaper access to vast range of electronic journals accessible on the internet. A study entitled, "The digital divide and the competitive behavior of internet backbone providers", by **Roseman Daniel (2003),** revealed that charging arrangement for Internet Interconnection Services (IIS) are a very controversial issue in the context of international telecommunications liberalization. The findings reveal that there are performance guarantees in transit agreements which help the customer to have a choice of backbone suppliers in order to achieve global access. **Gan., Ang., Choe (2003),** in their study entitled, "Customer loyalty of the Internet Service Providers in Singapore", inform that Singapore's telecommunication sector was liberalized on 1st April 2000 and this has resulted in greater competition for existing players in the sector. The results confirm the hypotheses that Singapore consumers are loyal to their ISPs and that pricing is not the sole factor for subscribers to switch ISPs. **Venkateswaran (2004),** in his study, "Impact of modeling approximations in supply chain analysis- an experimental study" maintains that supply

chain management requires the flow of products and materials between the parties in the network. The finding reveals that new software architectures are entering the market that allows the decision makers to manage the supply chain at both the tactical and operational levels. **Mohmed Nazim and Sanjiv Saraf (2006),** in their study, "Information Searching Habits of Internet Users: A user study of Banaras Hindu University", elaborated the extent of internet users in the university. The findings reveals that slow speed, high internet charges, lack of training are some of the factors which affect the use of internet. **Bauer and Scott E.Hein (2006)** maintain that Financial Service Providers have increasingly offered customers new remote access services through internet banking. The study suggests that older consumers are found to be less likely to adopt internet banking regardless of their risk tolerances while the younger consumers are found to be early adopters only when they have relatively high levels of risk tolerances. **Johnston (2007),** in the article, "Service operations management; Return to roots", elaborates on service operations management and the study highlights that an increasing number of businesses are offering services rather than tangible goods and there are many ways to speed up processes or increasing efficiency through the use of internet services. **Thilini Kahandawaarachchi (2007),** in her study, "Liability of internet service providers for third party online copyright infringement", examined the liability of ISP for copyright infringement by their subscribers. The findings reveal that a universal set of rules to be made applicable in the context of internet, will avoid certain problems. **Gould Marie (2008),** in the article, "Internet Marketing Strategies", focuses on internet marketing and the strategies used to make the efforts successful. The study revealed that companies can decide which products are best to sell online. In addition, they can determine whether they want to sell on their own site or use online malls and

Commerce Service Providers (CSPs) to sell their products. **Tiwary and Richa (2008),** in their article, "Online Trading", explain securities trading through Internet or Online Trading. The findings reveal that the internet has become a powerful device for providing financial information and investors now have access to more information about asset valuations. **Wienclaw, Ruth (2008),** in the article, "E-Business Entreprise Applications- Research Starters Business", reveal that with the explosion of information technology and the internet over the past few decades, an increasing amount of business is being conducted over communication networks. **Nahrstadt, Bradley and Burton, Jeremy (2009)** examined the information on internet worldwide. The findings reveal that the ISPs need very high protection for their survival. **Penchuk, Robert (2010)** examined the new Federal Communications Commission (FCC) regulation which requires Internet Service Providers (ISPs) to offer ad-hoc open mobile access for consumers in the U.S. The findings reveal that the proposed regulation contradicts the goals of providing nondiscriminatory access while maintaining the price tiers that give incentives for providers. **Abdullah Bin Omar (2011)** focuses on the promotion of online banking technology which enabled banks to enhance their operations and achieve cost cutting effectively and efficiently. The study suggests that banks can improve the level of online banking services to compete with their rivals in banking industry as a whole.

4. STATEMENT OF THE PROBLEM

The demand for internet connection is on the increase day by day. The Internet Service Providers (ISPs) connect their customers by using a data transmission technology for delivering internet protocol such as dial-up, DSL, cable modem, wireless etc. There are many service providers who compete with each other in providing their services to their customers. Customers also depend mainly on internet to do

their day-to-day transactions such as e-banking, e-fund transfers, e-payment, online shopping, online share broking etc, which help the customers to save their time and to do their work promptly on time. Many service providers provide variety of services such as unlimited browsing facility for a minimum amount, hundred free calls and other attractive offers which facilitate the customers to go in for specific ISP to avail their services. Under these circumstances, ISPs like BSNL, SIFY, Airtel, Tata indicom, Reliance have come to the market to spread their wings by providing variety of services. Moreover, browsing centers charge a very high rate to the customers. This problem compelled the customers to avail internet facility for themselves through various ISP. Hence the attempt to examine customer perception towards ISP.

5. OBJECTIVES OF THE STUDY

To examine the awareness level and perception of the customers towards the services of Internet Service Providers.

6. HYPOTHESES OF THE STUDY

The present study tested the following null hypotheses.

NH1: Personal factors of the respondents have no significant influence over the source of awareness of information about Internet Service Providers.

NH2: Personal factors of respondents have no significant influence over the time of usage of internet services.

NH3: Personal factors of respondents have no significant influence over the amount spent per month for internet services.

7. METHODOLOGY OF THE STUDY

7.1 Area of the study

Coimbatore was the area of study, which is known for textiles, foundries, wet grinders, pumps manufacturing etc. It is also becoming a hub of schools, colleges and other educational institutions. Now, it is a City of Tidal Park also.

7.2 Source of Data

The study used only primary data. Primary data were collected by using interview schedule method. Interview schedules were prepared in a simple manner to facilitate the respondents to respond easily without any difficulty. Interview schedules were pretested and validated.

7.3 Sampling Design

For the purpose of study, 200 customers were selected for the study using simple random sampling technique.

7.4 Period of the Study

The period of study was one year from 2012 to 2013.

7.5 Tools Used for Analysis

For the purpose of detailed analysis, the following statistical tools were used in the study:

- Percentage Analysis
- Chi-square Analysis
- Average Score Analysis

8. LIMITATIONS OF THE STUDY

For want of time and for the purpose of detailed analysis, the study was confined to Coimbatore only. However, adequate care was exercised to collect unbiased data.

9. PROFILE OF THE RESPONDENTS

Age: 9% belonged to the age group of 10-20 years, 75% belonged to the age group of 21-30 years, 11.5% were from the age group of 31-40 years and 4.5% were above 40 years. **Gender:** 52% were males and 48% were females. **Educational Level:** 2.5% were up to school level, 16.5% were graduates, 59% were post graduates, 17% were professionals and 5% were diploma holders. **Occupational Status:** 35% were students, 15% were employed, 5% were self employed, 7% were professionals, 28% were businessmen and 10% of them belonged to Others. **Monthly Income:** 33.5% were in the income group of upto Rs. 10,000,

49.5% were in the income group of Rs. 10,000-Rs. 20,000, 12% were in the income group of Rs. 20,000-30,000 and 5% were in the income group of above Rs. 30,000. **Size of the family:** 26.5% reported two members in their family and 44.5% of them three members in their family, 5% of them four members in their family and 24% of them reported five and above members in their family.

10. ANALYSIS OF CUSTOMER PERCEPTION

Section A: Percentage Analysis of Customer Perception

Analysis of data by using percentage analysis of customer perception is depicted in **Table -1 and Table-2.** It is understood from **Table – 1** that among the total respondents, 95 (47.5%) became aware of ISP through friends and relatives, 50 (25%) were aware of it through advertisements and agents, 5(2.5%) were aware of it through neighborhood. It is understood from **Table – 2** that among the total respondents, 75 (37.5%) had selected ISP on the basis of better service, 50 (25%) had selected it due to less expensiveness, 33 (16.5%) had selected it due to speed, 25 (12.5%) had selected it due to better service and speed, 15 (7.5%) had selected due to speed and uninterrupted connection and 2 (1%) had selected it due to uninterrupted connection.

Section B: Chi-square Analysis of Customer Perception.

Analysis of data by using Chi-square analysis is depicted in **Table-3, Table-4 and Table-5.** The Chi-square test is used to test the independence of two attributes/ factors. This test is employed to test the significance of influence of one factor over the other. In this study, factors were classified under two categories such as personal factors and study related factors. The study related factors are:

➢ Source of Awareness about ISP

➢ Timing of Usage of Internet

➢ Amount spent per month for ISP

Each of the personal factors was compared with the study factors and chi-square test was applied at 5% level of significance. The results are presented with suitable hypothesis and suitable interpretations.

Test of Hypotheses

➢ **Personal Factors and Source of Awareness about ISP**

The **Table-3** shows that the hypothesis is accepted (Not Significant) in one case and in the remaining four cases, the hypothesis is rejected (Significant). It is concluded that except marital status, all other personal factors considered for the study exercised significant influence over the awareness about the Internet Service Provider.

➢ **Personal Factors and Time of Usage of Internet**

The **Table-4** describes the personal factors, chi-square values, p values and their significance on the usage of internet services. It is found from the Table that the hypothesis is accepted (Not Significant) in one case and in the remaining four cases, the hypotheses are rejected (Significant). It is concluded that except gender, all other personal factors considered for the study exercised significant influence on the time of usage of internet services.

➢ **Personal Factors and Amount spent per month of ISP**

The **Table-5** describes the personal factors, p values and their significance on the amount spent per month for ISP. It is found from the Table that the hypothesis is accepted (Not Significant) in one case and in the remaining four cases, the hypotheses are rejected (Significant). It is concluded that except family monthly income, all other personal factors considered for the study exercised significant influence on the amount spent per month for ISP.

Section C: Weighted Average Score Analysis of Customer Perception.

The Weighted Average Score Analysis is depicted in **Table-6.** In order to use this

technique, first the qualitative information is converted into quantitative data through a five point scaling technique similar to Likert Scaling Technique. The weighted average score is calculated mainly to assess the level of opinion and awareness of the different categories of the respondents on various issues and the results are presented in different tables. In this study, weighted average score analysis was prepared for ranks which were assigned by the respondents. In applying the above tool, quality characteristics could be converted into numerical value by using five point scaling. In the three point scaling technique, a score of three is highly satisfactory, score two is given for satisfactory and score one is given for not satisfactory. Based on the score, the weighted average score was calculated for each factor. It is understood from **Table-6** that majority of respondents experienced high level of awareness of Airtel services, followed by SIFY internet services and BSNL when compared to other internet service providers because of their high average scores. Majority of respondents experienced high level of awareness towards Airtel services.

11. FINDINGS OF THE STUDY

The findings reveal that respondents were aware of ISP through posters, pamphlets and banners about internet service providers and their awareness level was very high towards Reliance services. Respondents' preference for speed of the package was between 512 mbps and 1 mbps and they spent between Rs. 500 to Rs. 1000 per month for availing the internet services. Majority of respondents were highly satisfied with the price and downloading limit of their package and used the current service provider for a period of 6 to 12 months. The study also reveals that the respondents use of internet was very high and they checked their downloading limit assigned to their pack. Moreover, respondents did not switch to other internet services during the period of study.

12. SUGGESTIONS OF THE STUDY

➢ **Source of Awareness**

Internet Service Providers must be much more customer oriented than advertisement oriented, which will create more customers for their future plans. Hence Internet Service Providers have to focus on customers by giving more offers and thereby retain the customers through their varied services in the world of internet. Respondents selected the Internet Service Providers based on a wide area of services provided by them. As the customers want ready information within a fraction of a second, they go in for browsing of internet and therefore, speed plays a vital role. Hence the Internet Service Providers have to create a market through better customer service with high speed in order to face the stiff growing competition in the modern world.

➢ **Better Service and Minimum Cost**

The cost of service charge should be minimum in order to attract all types of customers. Hence it is suggested to the ISPs that they should focus on the unlimited broad band services to their customers without any disconnection problem, with minimum service charges and thereby they can provide hundred percent satisfactions to their customers. Internet Service Providers should assume sole responsibility for providing their services to set up LAN, WAN, MAN etc, so that the connectivity would not be interrupted, which enables the customer to stick on to their work promptly without any delay.

➢ **Customer Retention Policy**

ISPs have to be much more flexible in their policies and they should adopt various ways to retain their customers and prevent them from switching over to another brand of Internet Service Provider. Internet Service Providers may adopt suitable system in such a way to provide immediate connection to the customers

without any delay in time. At the same time, they can also be customer friendly to focus on their immediate needs. ISPs should respond immediately to the problems of customers without any delay so that they can satisfy the needs of the customers.

13. CONCLUSION

Internet Service Providers must concentrate on every aspect of customer needs rather than following strict rules and policies. ISPs must also go in for marketing research to study the customers' needs and also to study about other new strategies and latest technologies in providing quick services to customers without any delay in connection. The implementation of the above said facilities and innovative marketing strategies would help the ISPs to achieve the goal of success and in the long run, the customers would also be satisfied if the internet service providers deliver their services promptly with due care and diligence.

14. SCOPE FOR FURTHER STUDY

The present study was an attempt to study mainly the customer perception towards the services of ISP. The scope for further research is summarized below:

➢ The competency strategy among all the other ISPs could be taken up for further research.

➢ The study with similar objectives could be made from time to time.

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Table - 1

Source of awareness wise distribution of the respondents

Source of Awareness	Number of respondents	Percentage
Advertisements	50	25.0
Friends and Relatives	95	47.5
Neighbourhood	5	2.5
Agents	50	25.0
Total	**200**	**100**

Source: primary data using percentage analysis

Table 2: Factors influencing the respondents to select the ISP

Factors	Number of respondents	Percentage
Less Expensive	50	25.0
Better Service	75	37.5
Speed	33	16.5
Uninterrupted Connection	2	1.0
Speed and Uninterrupted Connection	15	7.5
Better service and speed	25	12.5
Total	**200**	**100**

Source: primary data using percentage analysis

Table - 3

Chi-Square Analysis -Personal factors and Source of awareness about ISP

Personal Factors	Chi-Square Values	P values	Significant/ Not Significant
Age	18.817	0.000*	S
Gender	17.097	0.047*	S
Marital Status	2.508	0.474	NS
Educational Qualification	76.406	0.000*	S
Family Monthly Income	13.738	0.003*	S

* S-Significant (p value ≤ 0.05); NS- Not Significant (p value > 0.05)
Source: primary data using spss

Table – 4

Chi-Square Analysis – Personal factors and Time of Usage of Internet Services

Personal Factors	Chi-Square Value	P Values	Significant/ Not Significant
Age	12.998	0.000	S
Gender	2.508	0.474	NS
Marital Status	67.09	0.000	S
Educational Qualification	18.817	0.000	S
Family Monthly Income	17.097	0.047	S

* S-Significant (p value ≤ 0.05); NS- Not Significant (p value >0.05)
Source: primary data using spss

Table - 5

Chi-Square values – Personal factors and amount spent per month for ISP.

Personal Factors	Chi-Square Value	P Values	Significant/ Not Significant
Age	54.243	0.000	S
Gender	4.984	0.083	S
Marital Status	12.901	0.002	S
Educational Qualification	67.996	0.000	S
Family Monthly Income	1.857	0.173	NS

* S-Significant (p value ≤ 0.05); NS- Not Significant (p value >0.05)
Source: primary data using spss

Table - 6

Table 6: Average Score – Personal Factors and Awareness about Service Providers

Personal Factors		BSNL	AIRTEL	RELIANCE	SIFY	TATA INDICOM
Age (years)	Below 25	2.94	3.63	3.72	3.36	3.26
	25 to 45	3.13	3.56	3.35	3.33	3.54
	45 to 65	3.59	3.55	3.27	3.74	3.28
	65 above	3.28	3.65	3.3	3.70	3.87
Gender	Male	3.17	3.17	4.08	3.57	3.62
	Female	3.25	3.28	3.61	3.44	3.85
Marital Status	Married	3.29	3.38	3.51	3.60	3.85
	Unmarried	3.07	3.83	3.5	3.45	3.46
Educational Level	No formal education	3.37	3.29	2.63	3.60	2.36
	School level	3.04	3.51	3.5	3.53	2.78
	College level	3.35	3.87	3.65	3.51	3.56
	Professional Level	3.42	3.42	3.52	3.58	3.48
Occupational Status	Agriculture	3.39	4.2	4.6	3.2	4.6
	Business/self employed	3	3.25	4.5	3.45	3.65
	Government employee	3.22	3.36	3.8	3.4	3.26
	Private sector employee	3.14	3.69	3.58	3.42	3.45
	Others	3.42	3.46	3.17	3.93	3.64
Monthly Income	Upto 20000	2.64	4.67	4.5	4.67	3.26
	20000 - 30000	3.10	3.64	3.93	3.57	3.62
	30000 - 40000	3.31	3.36	3.48	3.75	3.42
	40000 and above	3.03	3.64	3.57	3.32	3.28
Size of Family	Upto 2 members	4.26	3.80	3.20	3.46	3.69
	3	3.42	4.11	3.17	3.25	4.67
	4	4.32	3.69	3.29	3.4	3.82
	5 and above	4.63	3.26	3.45	3.93	3.45
Type of Family	Nuclear family	3.96	3.85	3.87	3.96	3.52
	Joint family	4.25	4.12	3.65	3.59	3.89

Source: primary data using spss