The Impact of Perceived Service Quality on Customer Loyalty in IT Sector of India

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Abstract: *This study is done to analyze the impact of perceived service quality on customer loyalty in IT sector of India. Parasuraman in his initial study carried out in 1988 determined five dimensions which became base for the measurement of perceived service quality. Perceived service quality is deemed to be independent variable while customer loyalty was treated as a dependent variable. The later could however be measured by 13 items which was previously proposed by Zeithaml (1996). Reliability, empathy, competence of staff, accessibility and tangibles are the key factors that best explains customer's expectations. A SERVQUAL scale was used to measure service quality perceptions from the perspective of domestic and international customers. Data were collected in 15 outlets of IT service providers, using a self-administered questionnaire. Descriptive statistical analysis, exploratory factor analysis and reliability analysis were conducted. This study reveals that the expectation level of customers is very high towards service quality. Thus, the findings can be used as a guide for IT industry to improve the quality attributes and enhance service quality and business performance which in turn will improve the trust and loyalty of customers. More specifically, it is found that the empathy dimension is the strongest predictor of customer loyalty.*

Keywords: Perceived Service Quality, Customer Loyalty, SERVAQUAL, Factor analysis, Reliability analysis, Internet Service Providers

1. Introduction

A service is a set of singular and perishable benefits delivered from the accountable service provider, mostly in close coaction with service suppliers, generated by functions of technical systems and by distinct activities of individuals according to the needs of service consumers [14]. Studies reveal that the contribution of the services sector to the Indian economy has been assorted 55.2 per cent share in gross domestic product (GDP), growing by 10 per cent annually, causative to about a quarter of total employment, accounting for a high share in foreign direct investment (FDI) inflows. India continues to be the dominant player in the global outsourcing sector. However, its future will depend on how the challenges related to its continued competitiveness are tackled. These include increasing competition, rising costs, talent shortfall, infrastructure constraints, increasing risk perception, protectionism in key markets, and deteriorating business environment.

IT and ITeS sector added laurels to India by gaining a brand identity as a knowledge economy. The IT industry has four major components: IT services, business process outsourcing (BPO), engineering services and R&D, and software products. The growth in the services sector in India has been led by the IT-ITeS sector which has become a growth engine for the economy, contributing substantially to increases in the GDP, employment, and exports. This sector has improved its contribution to India's GDP from 4.1 per cent in 2004-05 to 6.1 per cent in 2009-10 and an estimated 6.4 per cent in 2010-11.

In early 2004-05 growth of IT industry was nearly negligible in India. According to NASSCOM, the year 2010-11 is characterized by broad-based growth across mature and emerging [10] verticals. The overall Indian IT-ITeS generated revenue grew to US $ 63.7 billion in 2009-10 and an estimated US $ 76.1 billion in 2010-11. Exports lead the IT & ITeS industry, and compose about 77 per cent of total industry revenue. Total IT-ITeS exports have grown from US$ 17.7 billion in 2004-05 to US $ 49.7 billion in 2009-10 and an estimated US $ 58.9 billion in 2010-11 registering a CAGR of 22.2 per cent from 2004-05 to 2010-11.

In this period exports had vastly influenced the market and which filled the new blood in veins drowning industry. Simultaneously domestic market shown its significant contribution which was revealed by the facts that the revenue growth of US $ 14 billion in 2009-10 and an estimated revenue of US $ 17.2 billion in 2010-11. The IT and BPO industry witnessed a quick rebound in growth and has been estimated to have grown by 19.5 per cent, aggregating revenues of US$ 76.1 billion in 2010-11 with exports at US$ 58.9 billion accounting for a

major portion

This sector has also led to employment generation. Direct employment in the IT services and BPO/ITeS segment was 2.3 million in 2009-10 and is estimated to reach nearly 2.5 million by the end of financial year 2010-11. Indirect employment of over 8.3 million job opportunities is also expected to be generated due to the growth of this sector in 2010-11. These jobs have been generated in diverse fields such as commercial and residential real estate, retail [13], hospitality, transportation, and security.

This sector has also received immense support of Government. This was continued in the 2010-11 Budget with policies like Government expenditure for improving IT infrastructure and delivery mechanism, reduction in surcharge from 10 per cent to 7.5 per cent for IT companies and Government's E-Governance plan. There are certain subjects in the IT-ITeS sector which needs consequent attention. These include jerky flow of services from low-end to high end services like programming in the light of competition in BPO from other countries and policies in some developed countries like UK to employ locals; data protection issues as half of offshore work does not come to India; concluding final agreements with target countries to resolve the social security benefits issue as is being done now; and increasing the coverage and depth of IT and ITeS services in the domestic sector..

Over the past years, organizations and individuals in various places in the world have felt the benefits of Internet which has evolved highly. The Economic Survey 2011-12 presented that the Services Sector continues to remain growth engine for Indian Economy. The Economic Survey points out that the Services Sector grew by 9.4% which was little higher than in the previous year. In order to have right to use the internet and enjoy its features, consumer needs an Internet Service Provider (ISP). The organization that provides its customers with direct connections to the Internet and thus endow with full access of internet services to anyone possessing a computer and a modem is known as ISP. Thus who so ever then needed internet connection has to choose an ISP for the same.

IT and ITeS and Construction Services express no cause for worry despite a slight moderation in services growth. This moderation is due to the steep fall in growth of public administration and defense services reflecting fiscal consolidation.
The giants of industries like Ericsson, Apple, Hewlett-Packard and Siemens are recognizing the opportunity of fast growing service industry and profit through services. The fast developing technologies and increasing competition make it difficult to gain strategic competitive advantage through physical products alone. In present era customers are becoming more demanding. Now

customers not expect excellent, high-quality goods and technology, they also expect high levels of customer service and total service solutions along with them. At Siemens, the Business Services division was established in 1995 as an international full-service provider of information and communication technology solutions and services. In outsourcing and IT maintenance, it is one of the world's top 10 suppliers with worldwide sales of 5.4 billion euros (2005). Technology giant Dell offers virtually all its customer service and ordering functions to its business customers via technology. Over 90 per cent of its transactions with customers are completed online. Jamjar.com, owned by the Royal Bank of Scotland Group, sells new cars online. This all shows how fast the world is getting digital. This will save the time and energy of customers and suppliers as well. Consequently, in India the boost up in the number of people using internet leads to increase in the number of ISP in the market. Nevertheless, now it is inadequate to simply provide a service to customers, because what was referred fine enough in the past is not sufficient now.
Switching barriers are now loosing up and so whenever any service customer feels unsatisfied or partially satisfied he/she immediately starts searching for options to switch. Adrian Payne stated much earlier in his studies that most of the companies pay attention only of attracting ne w customers rather than retaining the present customers. At an average a company loses 10 to 30 percent of customers every year. However to overcome such circumstances, relationship building strategies [8], service recovery attributes are becoming popular these days. So, instead of targeting to acquire new customers, making loyal customers can help an organization survive in this competition. Indeed, any service organization that wants to survive and gain a competitive advantage needs to care about its customers. For this reason, it is important for a service organization to understand its customers, to be aware of their needs and expectations, and of course to know how they perceive the quality of the service provided to them. Perceived service quality [16] and customer loyalty [11] themselves are vast domain. These concepts have been investigated separately with the purpose of understanding each term alone. Gaining loyal customers and providing high service quality [18] have been considered as important issues for the continuous success of any company but due to lack of studies there is less interaction of these two concepts, especially in the ISP industry. In order to attain the loyalty [15] of customers, company has to understand the facts on which it has to focus to gain competitive advantage.

Firms are repeatedly looking for new ways to gain strong competitive position in the marketplace and due to increased competition customers look over demanding. Companies may provide better quality

than their competitors since according to Lorenzo customers remain faithful to companies providing quality service systematically. However, to provide a better quality service, it is significant to find out how service quality is perceived by customers and what do they mean by quality because the problem that most companies tackle is how to offer quality service that will lead to customer loyalty. Thus, studying perceived service quality [2] and exploring its effect on customer loyalty may help organizations in surviving strong competition. Taking ISP into consideration differentiating oneself and standing unique in industry become difficult consistency of the service become an important issue. This is due to the fact that organizations allot substantial resources to assess and check quality in order to gain customer loyalty. Accordingly, the significance of this study arises from the fact that it provides useful and valuable information to any ISP in India which is interested in making success from loyal customers.

2. Literature Review

Internet access came into India in the early 90's. The ERNet (Educational and Research Network), a division of Department of Electronics (DoE), and NICNet (Department of Statistics) made the initial inroads in this field. VSNL was first ISP player in India and were doing quite well in providing the essential Internet services to an Internet-starved India. Satyam Infoway Ltd. is the first private sector ISP in India after October 1998. Internet services market in India is expected to witness a healthy growth in coming years also as Internet subscribers in the country are projected to grow at a CAGR of around 56% during 2010-11 - 2013-14. At present 10.2 percent of Indian population that is 121,000,000 uses internet in India. Well, from a meager 25,000 users in 1998 it has grown to 100 million users. Though it is hardly 10% of the Indian population it still puts India at number 3 in world Internet users after China and the United States. Recent study done by ComScore highlights that the worldwide online audience has jumped 7%, with Asia-Pacific markets adding more than 40 million users. India has been identified as the fastest growing online market during the same period, with a 41% rise.

a. IT industry and software contribution towards Indian Service Economy: The Indian software industry is mainly export-oriented. The industry garners around 60-70 per cent of the total revenue from its two largest markets, namely the US and Europe. The economic slowdown in these major export destinations led to a deceleration in growth of sales of the Indian software industry to 5.9 per cent. However, sales are expected to grow at 16.9 per cent and 17.8 per cent, respectively during 2010-11 and 2011-12 due to higher client additions and an uptick in billing rates.

b. Internet and Broadband: The Internet, which is another growing mode of communication, is a worldwide system of computer networks. Broadband is often called 'high speed Internet, because it usually has a high rate of data transmission. Broadband subscribers grew from 0.18 million in 2005 to 10.71 million as at the end of November 2010. The number of Internet and broadband subscribers is expected to increase to 40 million and 20 million, respectively by 2010. Introduction of BWA (Broadband Wireless Access) services will enhance the penetration as well as growth of broadband subscribers. Wi Max has also been making headway in penetration of wireless broadband connectivity across all sectors.

It was revealed in a research that 75% of the internet audience in India to be aged 35 years and below, promising to make it the youngest online population in the coming years. Females formed 39.3% of the total audience, and the sharpest growth was observed among male and female segments in the age-group 15 to 24.

Indeed, the quality of service is sometimes more important for customers than the cost of acquiring that service. Thus calls a need for the organizations to focus on providing customers with the highest possible level of quality. Based on past experiences brand image, word-of-mouth communication and proper evaluation of their own needs, customers create expectations of the service which they are willing to purchase.

SERVQUAL, the 22-item scale developed by Parasuraman is considered one of the most widely used instruments in the measurement of service quality[4] and is based on fives dimensions[7]:

- Tangibles: physical facilities, equipment, and appearance of personnel.
- Reliability: ability to perform the promised service dependably
- Responsiveness: willingness to help customers and provide prompt service.
- Assurance: knowledge, courtesy of employee, ability to inspire trust and confidence.
- Empathy: caring, individualized attention that the firm provides its customers.

The concept of attitudinal loyalty follows the cognitive school of thought where cognitive researchers focus on the role of processes in defining loyalty. Conceptualizations have changed over years to become more meaningful, including both attitudinal (psychological) and behavioral dimensions of loyalty [5]. The most effective business effort available to organizations which want to gain customer loyalty stated that when the service provided is Internet, it is not sufficient to measure network performance to determine the

quality of the service perceived by the user because they are different construct and are measured differently. Based on above discussion, this study has led to the following hypotheses:

H1: Impact of perceived service quality in term of tangibles on customer loyalty.
H2: Impact of perceived service quality in term of reliability on customer loyalty.
H3: Impact of perceived service quality in term of responsiveness on customer loyalty.
H4: Impact of perceived service quality in term of assurance on customer loyalty.
H5: Impact of perceived service quality in term of empathy on customer loyalty.

3. Research Methodology

3.1 Population, Sample, and Data Collection

The population of this study consists of internet subscribers. Indeed, the data was mostly filled by the VSNL and BSNL subscribers who were found out in premises of these offices and internet subscribers as they came to pay their bills at its different sales shops. VSNL has huge list of subscribers and authenticity of data from such sources is most acceptable. It was difficult to have access to information (e.g. emails or mobile numbers) that could help in contacting or reaching customers because of privacy and security issues. Moreover, the sample size for a population consisting of 291067 subscribers must be 384.
500 questionnaire were distributed out of which number of questionnaires returned was 443 and 420 were found to be valid.

3.2 Measures

The research is quantitative in nature. The items selected to measure the concepts of perceived service quality and customer loyalty were primarily derived and taken from literature. Perceived service quality was measured using five dimensions (tangibles, reliability, responsiveness, assurance, and empathy) of SERVQUAL. The perceived service quality was measured using a five-point rating scale rating from one: 'strongly disagree' to five: 'strongly agree'.

4. Data Analysis

In order to examine the research hypotheses, the data collected through the questionnaire distributed to the customers were analyzed.

4.2 Respondent's Profile

The respondents for this study were asked to give information about their gender, age, education level, and family status. The data reveals number of male is more than female which imply that men use internet more. There is no significant impact or marital status of respondents as both have similar fashion of using internet and probably time of using in both types of respondents affects [12] less.

4.1 Hypothesis Testing

Research study was started by multi-co linearity diagnosis for testing hypothesis which was done using Variance Inflation Factor (VIF) and tolerance value. The tolerance values range between 0.4 and 0.5 which are above 0.2. This suggests that the hypothesis does not suffer multi-co linearity problem in the regression model. The results as shown in table are all below 0.75 and thus do not suggest high correlation between the variables.

Then after multiple regressions analysis was used to test the hypotheses. Customer loyalty was entered as the dependent variable and perceived service quality (tangibles, reliability, responsiveness, assurance, and empathy) as the independent variables.

Table I: Multiple Regression analysis for testing hypotheses

	Adjusted R Square	F	Sig.	Beta	T	Sig.
Reliability				.172	2.885	.004
Responsiveness				.127	2.292	.022
Assurance	0.5	85.163	0.000	.116	2.025	.044
Tangibles				.173	3.507	.001
Empathy				.264	5.497	.000

With reference to the table above, F = 85.163 and p-value = 0.000. As p-value is smaller than the level of significance (0.05), all the hypotheses are accepted at $p < 0.05$ significance level. Hence, there is a statically significant impact of perceived service quality (tangibles, reliability, responsiveness, assurance, and empathy) on customer loyalty. Perceived service quality had been considered by many researchers as a determinant or antecedent [3]of customer loyalty. Therefore, the findings are consistent with the results found in numerous previous studies.

The adjusted R Square's value of (0.5) indicates the proportion of the variance in the criterion variable and shows about 50% of the variance in customer loyalty. Besides perceived service quality; there may be different factors which influence customer loyalty. Thus, perceived service quality explained to a relatively good extent the variance in customer loyalty[1] in the ISP industry. The t and sig. (which is known as p-value) values, as shown in table I, give a rough indication of the impact of each predictor variable. A big absolute t value and small p value suggests that a predictor variable is having a large impact on the criterion variable. The results show that all perceived service quality dimensions have a significant impact on customer loyalty. Also, the standardized beta coefficient is a measure of the contribution of each predictor or how strongly each predictor variable influences the criterion variable. A large value indicates a large effect on the criterion variable. The strongest predictor for customer

loyalty is empathy, achieving a β of 0.264, followed by tangibles (β=0.173), reliability (β=0.172), and responsiveness (β=0.127). The last factor influencing customers loyalty towards their ISP is assurance (β=0.116). In various researches of past reliability is considered to be the most important and tangibles the least important service quality dimensions with respect to customer loyalty.

5. Conclusion

The fast growing world and excessive contribution of Service industry in our economy compels us to satisfy the customer. This however could be done if service provider understands the perceptions [17] of customers because it relates strongly to the continual survival, as well as the future growth and development of organizations. The results of multiple regression analysis shows that perceived service quality [8] dimensions have a important impact on customer loyalty.

5.1 Applications

This study enables others to recognize the effect of perceived service quality on customer loyalty in ISPs in India. Since availability of data was limited so efforts were done that study may not deviate the field and may not get affected but the available survey reports of other countries. In addition multidimensional perspective was also taken into count during study of customer perception of service quality and service loyalty [6].

In addition to the theoretical development, the findings further can be utilized for the expansion and implementation of practices that will lead to loyal customers. This may help corporate decision makers in an exact evaluation of service loyalty and optimization of allocation of resources. This enables managers to be aware of how customer perception of service quality affects customer loyalty and then identify the characteristics of these effects.

5.2 Limitations and Recommendations

Since the population of this analysis is very huge, the data were not easily available and it was tough to have access to information that could help in contacting or getting specific customers because of solitude and safekeeping issues. Therefore, this study used convenience sampling, and this might lead one to question the ability to generalize the findings. Thus, for future researches probability sampling technique like stratified random sampling techniques are recommended. Thus due to similarity of the ISPs' procedure, purpose, services provided and the same organizational and cultural environment allows for the possibility that the results of this study can be further utilized to other ISPs in India.

Since the results of this study are based on customers' perceptions of service quality only, future researches should investigate the comparison between customers' and service providers' perceptions of service quality.

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