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## A STUDY ON SERVICE QUALITY OF INDIAN TELECOMMUNICATION COMPANIES

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**ABSTRACT**

*The speed of development, intense competition, technological developments and confrontation with complex and dynamic environments has led to a survival challenge. Service quality in telecommunication sector plays a major role in customer satisfaction as telecommunication has emerged as one of the critical component of economic growth required for overall socio-economic development of the country and is now the second largest telecom market globally. With the liberalisation and internationalisation in telecommunication, service quality has become an important means of differentiation and path to achieve business success. Delivered service will become the Quality Service if it meets the customer expectations which depends upon the customer perception and may differ from person to person. As customer satisfaction is also influenced by customer perception. The present study is an endeavour to assess the comparative service quality level of the Government owned BSNL and Private Sector Airtel Telecommunication Companies in Himachal Pradesh. For analysing the customers' perception and their expectation towards service quality of telecommunication companies, a self-administered questionnaire relevant to telecommunication industry was constructed. The data was collected from 600 respondents. An attempt has been made to examine the significant gap between the service quality of Airtel and BSNL companies by using five point Likert scale and t-test on all eight dimensions of service quality. The results of the study indicated that there is a significant gap between the perceived satisfaction and expectation on service quality dimensions. Based on the findings it is recommended that telecom companies should provide excellent and desired service by improving the quality of service.*

**KEYWORDS**

service quality, customer, telecommunication.

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**INTRODUCTION**

In present time, the service sector is one of the most important sectors for almost all the countries and is a key contributor to the GDP. In today's competitive environment, any service organization cannot survive successfully without delivering high quality service. Now-a-days, the telecommunication sector is one of the most important service sectors of a country and emerged as one of the critical component of economic growth required for overall socio-economic development of the country and is now the second largest telecom market globally. Being a globalized market, the customers seek and demand world class products and set a benchmark and compare it. The telecom market is vast, subscribers are in huge number and their needs and expectations differ from each other. With the liberalisation and internationalisation in the entire telecommunication industry, the competition has increased and service quality has become a key factor in the creation of worth and in influencing customer satisfaction. Service quality can be defined as the personal experience of the customer with the service provider. Customers want to avail the different types of services provided by the telecom service providers. Delivered service will become quality service if it meets the customer expectations and customer expectation depends upon the customer perception which may differ from person to person. Service quality is a comparison of expectations about a service with performance. If the customer experience the same service as they expect then this difference will be zero and we can say that the service quality is very good. Higher the difference of above equation lower will be service quality. Most customers prefer good service to lower prices. This will lead to customer's perceptions exceeding their expectations and greater customer satisfaction. Customer satisfaction is also influenced by customer perception. Customer satisfaction is an estimate of how well the products or services offered by a firm meet or exceed customer expectation. If perceived performance is less than expected, customers will be dissatisfied. On the other hand, if the perceived performance exceeds the expectations, customers will be satisfied. By offering either services or products no business organisation can survive for a long time. To remain in the market, the organisations have to build its customer base by meeting the needs of its customers. Customers are requiring and demanding better services, these circumstances are exerting pressure on the existing players in the industry to rewrite their strategies and policies. They will have to raise their level of service to fight for the survival in the market. To provide improved quality service, telecommunication companies need to investigate degree of customers' sensitivity and expectations toward service quality in order to overcome the competitors and attract and retain the customers.

**REVIEW OF LITERATURE**

**Josh** (2011) conducted a study to compare Service Quality perception of customers across selected telecom service providers of Chandigarh, Mohali and Punchkula. A sample of 720 respondents was selected. The study shows that there was a high degree of instability among customers due to poor network, expensive mobile sets and poor customer care services. It has been found that service providers should more focus on network coverage, customer care services and should provide proper training to staff.

**Malik** (2012) in her paper titled "A Study on Customer Satisfaction towards Service Quality of Organized Retail Stores in Haryana" made an attempt to examine the relationship of dimensions of service quality and customer satisfaction. The data was collected through 500 questionnaires and was analysed by using SPSS. The paper revealed that the dimensions of service quality that is product quality, physical aspects and promotional schemes were positively related with customer satisfaction. A significant difference was found in physical aspects, promotional schemes, personnel interaction and after sale service. The study suggested that the retailers should ensure the availability of branded variety of products, store convenience, after sale services and should keep in mind the different perceptions and need of different categories of respondents to enhance customer satisfaction.

**Kant, Jaiswal and Mishra** (2017) in their study "The Investigation of Service Quality Dimensions, Customer Satisfaction and Corporate Image in Indian Public Sector Banks" investigated whether five dimensions of Service Quality namely, Tangibility, Reliability, Responsiveness, Assurance and Empathy had significant impact on

customer satisfaction. In the study, 640 retail customers of public sector banks in National Capital Region (NCR) of India were selected. The results of the study revealed that among all five dimensions of service quality, Tangibility and Assurance are recognised as most important predictors of customer satisfaction. The study suggested that to retain the customers the banks should focus on corporate brand building activities, tangible facilities and various human aspects. The previous discussion dealt with the review of existing studies and related topics was confined to explore the existing research gap which provides valuable information to frame the need, scope and objectives of the present study. The substantial work has been done on service quality, but such work has to be re-searched in the light of emerging challenges especially in the light of attaining higher customer satisfaction, but no study has been confined to assess service quality of selected telecommunication companies in Himachal Pradesh. There exists a research gap among various studies available so far. Therefore, the present study has been undertaken on service quality of selected telecommunication sector.

### NEED OF THE STUDY

In the era of globalisation-age of competition, it has become an essential task of every service organisation to provide a good service quality. Any service organization cannot survive successfully without delivering high quality service. Hence, it has become necessary to analyse the impact of service quality dimensions of customer satisfaction because if customers are satisfied with the service of a company, then it can increase the market share of the company. Moreover, rather than getting new customers, retaining old one satisfied and with the company for long time has been a much greater challenge. As pointed out in the literature survey, there seems to be dissatisfaction on the part of customers related to service quality provided by the telecom operators. The present study is the modest effort to study the level of customer perception towards the service quality dimensions of Airtel and BSNL telecommunication companies.

### OBJECTIVES OF THE STUDY

The present study is conceived with the following objectives:

1. To assess the service quality of Government owned (BSNL) and Private owned (Airtel) Telecommunication Companies.
2. To make comparison of service quality dimensions between Airtel and BSNL.

### RESEARCH METHODOLOGY AND DATA COLLECTION

The primary data was collected from the subscribers of both public and private sector telecommunication companies in the state of Himachal Pradesh. The scope of the study has been restricted to two telecommunication companies i.e. one public company (BSNL) and one private company (Airtel). The data was collected from 600 respondents, out of which 300 were Airtel subscribers and 300 were BSNL subscribers. Multi-stage and stratified sampling was applied to get the desired information from the respondents.

For analysing the customers' perception towards service quality of telecommunication companies, the questionnaire relevant to the telecommunication industry was constructed. In questionnaire, total 43 items were included under eight dimensions (Tangibility, Reliability, Responsiveness, Assurance, Empathy, Value added services, Pricing and Network quality) of service quality. In general, 22 statements were included from the original five dimensions of SERVQUAL instrument i.e. Tangibility, Reliability, Responsiveness, Assurance and Empathy and 21 additional statements were added to the SERVPERF scale only after reviewing the studies conducted in the telecommunication sector, personal interviews with teachers, customers etc. Assessment was done on the five point Likert scale from 5 (strongly agree) to 1 (strongly disagree). T-test was used to analyse the significant mean difference between the perception of customers of public and private sector telecommunication companies with regard to service quality dimensions.

### RESULTS AND DISCUSSION

#### TANGIBILITY

Tangible dimensions are those that indicate the overall outlook of the organization. How the customers perceive about the service after observing the outlook and visual appeal of the organization includes; appearance of building, cleanliness of facilities and appearance of personnel, communication material etc. is shown in table 1.

TABLE 1: STATISTICAL DESCRIPTION OF TANGIBILITY DIMENSIONS

Statements	Airtel	BSNL	t-value	p-value
Modern equipment and technology	3.8100	3.6400	2.748	.006
Employees outlook	3.2367	3.2267	.217	.828
Proper communication of information material	3.8400	3.5500	3.938	.000
Physical facilities visually appealing	3.8133	3.5833	3.203	.001
Outlets easily assessable	4.1319	3.8008	2.391	.017
Overall	3.7663	3.5601	4.112	.000

Source: Data collected through questionnaire

Analysis of table 1 reveals that overall mean score of perception of Airtel customers has been found 3.76 in comparison to 3.56 of BSNL, under tangibility dimensions. The highest mean score of responses has been found among both service providers i.e Airtel (4.13) and BSNL (3.80) as far as easy accessibility of outlets is concerned. Further, the lowest mean score has been found among both service providers with regard to employees outlook. The difference between perception of respondents on the statement of employees' outlook under tangible dimension is found insignificant. Whereas, statements relating to modern equipment and technology, proper communication of information material, visually appealing physical facilities and easy accessibility of retail outlets, the difference in the perception of customers of Airtel and BSNL is found significant at 1% level of significance. Overall, there is a significant difference in the perception of both the service providers.

#### RELIABILITY

The reliability dimensions of service quality are defined to which extent the correct, accurate and up-to-date knowledge and information is provided to customers and also perform service promised to subscribers is performed. The perception of customers on the dimensions of reliability is shown in table 2.

TABLE 2: STATISTICAL DESCRIPTION OF RELIABILITY DIMENSIONS

Statements	Airtel	BSNL	t-value	p-value
Show sincere interest in solving problems	3.8800	3.5967	3.715	.000
Provide the services at promised date and time	4.0700	3.8933	2.569	.010
Maintain records accurately	3.6067	3.4633	2.672	.008
Sound network system and easy connectivity of calls	3.9667	3.6700	3.709	.000
Activation & deactivation in agreed time	3.9067	3.6800	3.177	.002
Easy availability of information by employees	3.5067	3.2767	3.174	.002
Timely delivery of messages, voice message	4.3833	4.2167	2.995	.003
Overall	3.9028	3.6852	5.229	.000

Source: Data collected through questionnaire

As it is evident from the Table 2, overall mean score of responses in reliability dimensions in Airtel (3.90) is more as compared to BSNL (3.68). Amongst reliability dimensions, the mean score of responses on timely delivery of messages has been found maximum in both services providers i.e Airtel (4.38) and BSNL (4.21).

lowest mean score has been found on easy availability of information by employees among the subscribers of both Airtel (3.50) and BSNL (3.27), which shows that responses of both service providers are on lower side of mean value. A significant difference in the perception of respondents at 1 percent level of significance on service quality dimensions has been observed. Hence, it can be concluded that overall service quality of Airtel is better than BSNL, as far as all reliability dimensions are concerned.

#### RESPONSIVENESS

Responsiveness dimensions indicate the timeliness of the service of the firm. It is the responsibility of the company to respond to customer's complaints when concern quickly. Views of the customers of select service provider were solicited as shown in table 3.

**TABLE 3: STATISTICAL DESCRIPTION OF RESPONSIVENESS DIMENSIONS**

Statements	Airtel	BSNL	t-value	p-value
Employees are willing to help customers	3.6567	3.5100	2.326	.020
Employees have knowledge to answer the customers' queries.	4.0333	3.8333	3.321	.001
Employees never busy to respond to customers' requests	3.1367	3.1033	.433	.665
Employees tell exactly when services to be performed.	3.5933	3.4467	2.438	.015
Employees get feedback from customers.	3.8900	3.2400	7.793	.000
Overall	3.662	3.426	5.219	.000

Source: Data collected through questionnaire

The results of the Table 3 reveals that overall mean score of perception of customers for responsiveness dimension in Airtel are (3.66) more as compared to BSNL (3.42). The mean score of responses pertaining to employees answer the customer's queries has been found highest and lowest with regard to employees never respond to customer, among both the service providers. A significant difference in the perception of subscribers of both service providers has been observed in all five dimensions of responsiveness except in case of employees promptly respond to customers' requests, where the perception of all the subscribers is almost same irrespective of the service provider. Overall, a significant difference at 1 percent level of significance in the perception of all subscribers with regard to responsiveness dimensions has been observed.

#### ASSURANCE

Assurance consists of polite behaviour of the staff, respect and gratitude for the customers and building confidence in them about the service so that positive bonding between the customer and the service provider is established. Perception of the subscribers of the service providers on service quality on the basis of assurance is depicted in table 4.

**TABLE 4: STATISTICAL DESCRIPTION OF ASSURANCE DIMENSIONS**

Statements	Airtel	BSNL	t-value	p-value
Employees are courteous and polite with customers.	3.9433	3.8267	2.205	.028
Customers trust the employees	3.7967	3.6900	1.381	.168
Method of communication suits the needs of customers.	4.0533	3.9967	.910	.363
Employees give accurate presentation of products and services.	3.6300	3.5967	.522	.602
Customers feel that their transactions are safe	3.7100	3.7667	-.893	.372
Overall	3.826	3.776	1.260	.208

Source: Data collected through questionnaire

The analysis of Table 4 clearly demonstrates that overall mean score of responses of Airtel subscribers has been found 3.82 in comparison to 3.77 in BSNL. Mean score of responses of subscribers has been found maximum for the statement proper communication method and lowest for making presentation of products and services. Further, the difference between the perception of subscribers with regard to statement who feel that employees are courteous and polite with their customers is found significant at 5 % level of significance. Further, as far as trustworthiness of employees, proper communication system and accurate presentation of products is concerned, no significant gap between the perception of Airtel and BSNL subscribers has been observed. Overall, the perception of all subscribers is almost same irrespective of the service providers under assurance dimensions.

#### EMPATHY

Empathy means understanding and focuses on placing customers over and above everything else during the course of interaction. Service providers must be caring and should provide personal attention to customers and should be conveniently available. Perception of customers on Empathy dimensions has been presented in table 5.

**TABLE 5: STATISTICAL DESCRIPTION OF EMPATHY DIMENSIONS**

Statements	Airtel	BSNL	t-value	p-value
Employees give caring and individual attention to customers.	3.4900	3.4433	.775	.438
Understands the specific need of their customers	3.6667	3.5567	1.684	.093
Ease of taking a connection	4.1633	4.0367	2.017	.044
Welcome complaints and criticism and respond positively	3.6800	3.0300	8.777	.000
Overall	3.75	3.517	5.230	.000

Source: Data collected through questionnaire

Table 5 shows that overall mean score of responses of Airtel subscribers under empathy dimensions is more (3.75) as compared to BSNL subscribers (3.51). Amongst empathy dimensions, the highest mean score of responses on ease of taking a connection has been found high in Airtel (4.16) and lowest mean score has been found with regard to positive respond to complaints and criticism in BSNL (3.03). Further, a significant difference in the perception of subscribers pertaining to statements; ease of taking a connection and positive response to complaints and criticism, has been observed at 1 percent level of significance. Further, no significant gap in the perception of subscribers is found regarding the statements; employees pay personal attention and understand specific needs of customers. Overall, a significant difference at 1 percent level of significance has been found in the perception of both the subscribers of service providers as far as empathy dimensions are concerned.

#### VALUE ADDED SERVICES

Value added services include location based services, missed call alerts, voice mail box, mobile TV, online games, ringtones, SMS facilities etc. Value added service dimensions indicate proper and accurate information about the service and its charges. Perception of customers on the dimensions of value added services is shown in table 6.

**TABLE 6: STATISTICAL DESCRIPTION OF VALUE ADDED SERVICES DIMENSIONS**

Statements	Airtel	BSNL	t-value	p-value
Adequate variety of VAS	3.7800	3.6400	2.395	.017
No hidden charges for VAS	3.4800	3.2733	3.165	.002
Easily connectivity to customer care	3.4233	2.9933	5.167	.000
VAS started after customers' consent	3.5133	3.4367	1.104	.270
VAS deactivated without unnecessary trouble and charges.	3.3900	3.2567	1.747	.081
Overall	3.518	3.32	4.716	.000

Source: Data collected through questionnaire

The results of the Table 6 reveals that overall mean score of perception of the respondents in all the value added dimensions for Airtel has been found more (3.51) which is more as compared to BSNL (3.32). The subscribers of both the service providers are highly satisfied with adequate variety of value added services, as the mean score of Airtel subscribers is 3.78 in comparison to 3.64 for BSNL whereas lowest mean score has been found among the subscribers of both service providers on account of deactivation of services without unnecessary trouble and charges. A significant difference at 1 percent level of significance has been observed on service quality of Airtel on adequate variety of VAS, no hidden charges for VAS and easy connectivity to customer care centres. As far as statements relating to VAS started after customers' consent and VAS deactivated without unnecessary trouble & charges no significant gap between the perception of respondents has been observed.

#### PRICING

Price is one of the most important factor for customers while selecting a particular mobile plan. Price is the amount which customer pay against the utilization of product or service. Views of the customers of select service provider were solicited as shown in table 7.

TABLE 7: STATISTICAL DESCRIPTION OF PRICING DIMENSIONS

Statements	Airtel	BSNL	t-value	p-value
Reasonable call charges	3.1200	3.4433	-3.878	.000
Convenient recharge in various denominations	4.1400	4.0900	-.807	.420
Accurate information of tariff plans and schemes	3.6500	3.5467	1.971	.049
Accurate balance deduction/ billing	3.7800	3.6400	2.485	.013
Overall	3.672	3.68	-.180	.857

Source: Data collected through questionnaire

The perception of sample subscribers of the selected service provider with regard to pricing dimensions has been presented in the table 7 reveals that the overall mean score of Airtel subscribers is more (3.67) in comparison to BSNL (3.68). The mean score of responses among the respondents with regard to convenient recharge in various denominations has been found more in Airtel (4.14) in comparison to BSNL (4.09) whereas the lowest mean score has been found pertaining to the statement relating to reasonable call charges. Further, a significant difference in the perception of respondents on account of reasonable call charges, accuracy of information about plans, schemes and accurate balance deduction has been observed. However, overall the perception of the subscribers of both the service providers on pricing dimensions is almost same.

#### NETWORK QUALITY

Network quality which has become a key dimension in service quality as data using customers select the services of particular service provider on the basis of network coverage and speed also include voice quality, call drop rate, network coverage, and network congestion. Perception of the subscribers of the service providers on service quality on the basis of network quality is depicted in table 8.

TABLE 8: STATISTICAL DESCRIPTION OF NETWORK QUALITY DIMENSIONS

Statements	Airtel	BSNL	t-value	p-value
Wide network coverage	3.9867	3.6100	4.687	.000
Rarely face call dropping problem	3.3200	3.2367	1.121	.263
Strong roaming network coverage	3.4167	3.4733	-.883	.378
Call connected at first attempt	3.3133	3.1600	1.797	.073
Good call clarity	3.9367	3.8767	.963	.336
Instant delivery of messages	3.9100	3.8533	.885	.377
Overall	3.647	3.535	2.463	.014

Source: Data collected through questionnaire

Table 8 reveals the perception of customers on the basis of network quality dimensions, overall the mean score of perception of subscribers regarding network quality dimensions in Airtel is found 3.64 in comparison to 3.53 in BSNL. Amongst various network quality dimensions, the highest mean score with regard to wide network coverage has been found in Airtel (3.98) whereas, highest mean score in BSNL (3.87) has been found for good call clarity. The lowest mean score has been found in both service providers i.e Airtel (3.31) and BSNL (3.16) with regard to connectivity of call at first attempt. Further, a significant difference in the perception of subscribers of both service providers has been observed at 1 percent level of significance for wide network coverage. However, no significant difference in the perception of Airtel and BSNL subscribers has been observed on the statements relating to strong roaming network coverage, rare call dropping, calls connected at first attempt, good call clarity and instant delivery of messages. Overall there is significant difference in the perception of both Airtel and BSNL subscribers at 5 percent level of significance as far as service quality on network quality dimensions are concerned.

#### CONCLUSION

It can be summed up that, though the sample respondents are satisfied with the service quality of both Airtel and BSNL. However, subscribers of Airtel are found more satisfied in comparison to BSNL subscribers. The findings suggest that BSNL company should spend more on modern equipment and technology, proper communication system, appealing physical facilities and easy assessability of retail outlets. The telecom company should employ certain employees specifically to listen and redress the customer problems, ensure error free records, constantly communicate with customers regarding services, policies and other information and should focus on network system. The company need to be more effective and efficient in order to do services on time, as promised and right on the first time. It is suggested that the employees should be especially in BSNL imparted proper training, knowledge and be asked for feedback due to changed competitive environment. The employees should be trained in such a way that their behaviour towards customers is courteous and polite and handle the complaints and criticism in a positive way. The company should more focus on variety and full information of charges of VAS and easily connectivity to customer care centres. However, call rates of BSNL are found cheaper as compared to Airtel but Airtel provides accurate information about tariff plans & schemes and accurate deduction of balance in comparison to BSNL. Further, Airtel customers are more satisfied with network quality with regard to wide network coverage under the dimensions of network quality. The company should work more on the network quality problems. Overall, the result shows that the service quality regarding reliability dimensions of BSNL is low, as the subscribers are not satisfied with the availability of the desired service. It is observed from the study that there is a significant positive association between service quality and customer satisfaction and is evident that all service qualities dimensions highly contribute in increasing customer satisfaction.

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