

Service Providers Gaps and Customer Loyalty in Telecom Sector: A Study of Inverse Relationship

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ABSTRACT

The objective of this paper is to study the inverse relationship of service providers gaps with customer loyalty in the Indian telecom sector. Service providers gaps has been considered as independent variable whereas customer loyalty was considered as dependent variable. Five antecedents of service providers gaps have been considered in this study viz. reliability, assurance, tangibility, empathy and responsiveness based on SERVQUAL model as given by Parsuraman, Zeithaml and Berry [1]. A survey-based exploratory and causal research design was used. A 27 items instrument was generated comprising of 22 items for the five antecedents of independent variables on the basis of the work of Parsuraman, Zeithaml and Berry [1], and 5 items for customer loyalty on the basis of the work of Kaur and Soch [2]. The data was collected from 262 customers using mobile service of two telecom operators of J&K (BSNL and Airtel) through structured questionnaires. Cronbach's coefficient alpha was used to determine the reliability of the instrument. Multiple regression analysis was used to determine the causal relationship between both the independent & dependent variable. Results depicted that the service providers gaps has inverse relationship with customer loyalty. The study suggests that the service providers should put their endeavor to upgrade the technology and serve the customers with modern equipments.

Keywords: Service quality, Customer loyalty, Telecommunication, Customer's perception, Service expectation

I. INTRODUCTION

There is wider scope and potential of growth of the services in the developing country like India. The Indian telecommunication sector is the second largest in the world after China. In this Scenario, if service providers would not put their endeavor in differentiating them from competitors, customers are more prone to switch to other competitor at almost zero cost. Services are deeds, processes and performances [3]. Broadly speaking, "services are economic activities that creates value and provide benefits for customers at specific times and places as a result of bringing about a desired change in or behalf of the recipient of the services" [4]. Success of a service provider depends on the high quality relationship with customers [5] who determine customer satisfaction and loyalty [6]. For service marketing, service quality is an essential plank [7]. Building long term relationship becomes a necessity today due to fierce competition in the market and hence customer loyalty is a growing concern of today. Indian Telecom industry has undergone a transformation change in past decade especially after the concept of privatization and strongly felt the need of customer loyalty. This need was felt due to availability of enormous number of market players in India. This stiff competition has compelled the service provider to compete in the market and to differentiate themselves on the basis of a factor other than price. Hence, this very concept of service quality has arisen and gained attention. Better service quality provides competitive advantage to the organization. Any service organization can differentiate itself by providing high quality service.

The present study aims to evaluate the expectations and perception in telecom sector in the context of customer service quality. Organizations' primary emphasis of both academic and managerial efforts are focused on determining what service quality meant to customers and developing strategies to meet customer expectations [8] [1]. To put it other way, the success of service marketing depends upon the manner, the activities of external marketing have been carried out. The success of external marketing, itself depends how well the organization has been able to identify the customers' requirements and has carried its programs in the light of market orientation philosophy. Therefore, the success external marketing helps organizations understand customers' expectations and consequently offer in the light of the understanding. This results in

least performance – expectations gap and consequent desired customer loyalty. Therefore, the expectation v/s perception and resultant gap was examined around the components of service quality.

Hence, this study is an attempt to analyze the impact of service providers gaps on loyalty with the focus on Gap 5 and attract the attention of practitioners towards betterment of service quality to reduce the customer attrition, and to give suggestions to improve the service quality. The results of the study help to determine the aspect of service providers gaps (reliability, assurance, tangibility, empathy and responsiveness) to be focused while formulating strategies to retain the loyal customers. In the present study service quality of two leading telecommunication companies of India have been studied- BSNL and Bharti Airtel.

II. REVIEW OF LITERATURE

The service sector has been contributing tremendously for the growth of world economy. The sector has been main engine of the developed countries, as it contributes substantially towards their GDP sector. Service quality, one of the significant antecedents of customer satisfaction, exerts stronger influence on customer satisfaction and consequent purchase intention [9]. Gronroos [10] defined service quality as “The result of an evaluation process where the consumer compares his expectations with the service he perceived he has received”. In general, perceived service is compared to expected service. When one views the different definitions of this construct, the type of expectations used in its assessment has been the most unique characteristics [11]. Services are economic actions accessible by one party to another. Often time based, performances bring about desired results to recipients, items, or other resources for which purchases have accountability [12].

SERVICE PROVIDERS GAPS- Customer satisfaction arises from the discrepancies between prior expectations and actual performance of the product. As the perceived quality of service is the antecedent to determine customer satisfaction, it can also be interpreted as a measure of how well the service level delivered actually matches the customer's expectation [10]. Following this line of thinking, Parasuraman, Zeithaml and Berry [8] further elaborated this concept with a Gap Model which embraces a set of five gaps existing in the process regarding the management perception of service quality desired by customers and the service tasks required to deliver such an expected service to them. These gaps, as identified by Parasuraman, Zeithaml and Berry [8], include:

Gap 1: The difference between customer expectations and management perceptions of customer expectations.

Gap 2: The difference between management perceptions of customer expectations and service quality specifications.

Gap 3: The difference between service quality specifications and the service actually delivered.

Gap 4: The difference between service delivery and what is communicated about the service to customers.

Gap 5: The discrepancy between customers' expectations on the service and their perceptions of the service performance.

Amongst these gaps, gap 5 would be a function of the other four gaps.

SERVICE QUALITY- Service quality has received a major amount of consideration by both researchers and practitioners. It has been distinct as a type of a thought related but not comparable to satisfaction that fallout from the association of expected service levels with perceived performance [13] [14] [15]. Modern marketing research in relation to customers' attitudes toward services has paying attention on perceived service quality. Perceived service quality is defined as the customer's assessment of the overall brilliance or authority of the service [16]. Parasuraman, Zeithaml and Berry [8] [1] reflect on that a customer's assessment of overall service quality depends on the gap connecting expectations and perceptions of tangible performance levels. They intend that in general service quality is evaluated on five primary dimensions: tangibles reliability, responsiveness, assurance, and empathy. They suggest that each quality dimension can be quantified by obtaining procedures of expectations and perceptions of performance levels for service attributes related to each dimension, calculating the distinction between expectations and perceptions of actual performance on these attributes, and then averaging transversely attributes. They furthermore suggest that expectations should be influenced by individual needs, word-of-mouth announcement, and past experiences. Zeithaml, Parasuraman and Berry [17] perceived service quality is postulated to be subjective by the gap linking expectations and perceptions of performance (i.e., disconfirmation). However, the literature suggests a more elaborate copy in which disconfirmation, expectations, and actual performance levels influence customer satisfaction, which, in turn, becomes a key to customers' perceptions of service quality. Service quality measurement is significant as it has the possible to present insights into areas of service quality strengths and weaknesses.

Zeithaml, Berry and Parasuraman [18] have developed and tested a strong evaluate of service quality, referred to as SERVQUAL. SERVQUAL is a 22 item scale consisting of five dimensions: reliability, responsiveness, assurance, empathy, and tangibles. Measuring customer “expectations” and “perceptions” of these five dimensions assesses service quality. Service quality is positively disconfirmed when customer perception exceed expectations.

SERVQUAL can serve as an effective indicative tool to direct management in its service quality perfection efforts by focusing awareness in the areas that are most needful [19]. Service quality dimensions positively affect loyalty [20]. SERVQUAL is an interpreter of customer satisfaction and Customer Loyalty with three out of the six quality dimensions of the chosen instrument and network quality dimension has a positive effect on customer satisfaction [21].

Service quality dimensions- Research suggests that customers do not perceive quality in a uni-dimensional way but rather judge quality based on multiple factors. The dimensions of service quality have been identified through the pioneering research of Parasuraman, Zeithaml and Leonard Berry. Their research identified five specific dimensions of service quality that apply across a variety of service contexts. Customer service, pricing structure and billing systems are the service quality dimensions which have more significant positive effect on customer satisfaction which in turn affects customer loyalty [21]. Among the dimensions of service quality customer service and system reliability is most influential on perceived value and customer satisfaction and the influence of “content quality” ranks second [22]. Some studies have revealed that three dimensions (tangibles, empathy and assurance in SERVPERF did affect the level of customer satisfaction even though relationships were weak [23].

- I. **Reliability:** Ability to perform the promised service dependably and accurately. Reliability has a positive effect on customer loyalty (i.e., to perform the promised service) dependably and accurately [20].
- II. **Assurance:** Employee’s knowledge and courtesy of employees and their ability to inspire trust and confidence. Ability to convey trust and confidence. Service providers are expected to be the experts of the service they are delivering.
- III. **Tangibles:** Appearance of physical facilities, equipment, personnel, and written materials. Tangibility was found to positively affect customer loyalty. The quality of being discernible by touch [20].
- IV. **Empathy:** Caring, individualized attention given to customers. Empathy was found to positively affect customer loyalty [20]. Some recent studies have shown a post-adhoc analysis of telecommunication industry received excellent ratings on tangibles, particularly customer service and lower rating on empathy particularly service providers. Tangibles are an aspect of service quality. Service delivery systems should create positive moments of truth by ensuring that customer’s point of contact is reduced to minimum [24].
- V. **Responsiveness:** Willingness to help customers and provide prompt service. Some research studies have argued that using gap analysis, service quality is found among this dimension along with responsiveness dimension, communication dimension, discipline dimension assurance dimension other dimension and subscribers satisfaction [25].

CUSTOMER LOYALTY- Customer loyalty is frequently examined from a behavioral point of view by measuring items such as amount of recurrence purchases, “share of wallet” and purchase frequency. A common statement is that loyalty translates into an unspecified amount of repeat procurements from the similar supplier over a particular period [26]. Oliver [27] defined loyalty as “An intensely held ability to re-buy or re-patronize a chosen product/service persistently in the future, thereby causing repetitive same-brand purchasing, in spite of situational influences and marketing efforts having the potential to cause switching behavior”. However, the description of loyalty based solely on repurchase behavior doesn’t provide a holistic view of this intricate concept. This drove researchers to put forward alternative and more complete definitions. Dick and Basu [28] suggested that loyalty has evenly attitudinal and behavioral fundamentals and argued that it is determined by the strong point of the relationship between relative attitude and repeat support. Exploratory loyalty under the attitudinal lens, it can be resulting from psychological contribution, judgment and a sense of concern towards a particular product or service [29] [30]. In general, even though the fact that there are plenty of dissimilar approaches aiming at the definition and conceptualization of loyalty, there is a universal meeting towards the view that both behavioral and attitudinal features must be built-in. The behavioral view is usually based on the monitoring of the occurrence of frequent purchases and brand switches, while the attitudinal approach assumes that loyalty is resulting from psychological involvement and preference and focuses on issues such as brand recommendation, confrontation to better products, repurchase intent and willingness to pay a price best [15].

GAPS MODEL- Service quality model also known as Gaps model was developed in 1985. It highlights the main requirements for delivering a high level of service quality by identifying the “gaps” that can lead to unsuccessful delivery of service. Customers compare the service they “experience” with what they ‘expect’ and when it does not meet the expectation, a gap arises.

Customer’s perception- Perceptions are constantly considered comparative to expectations because expectations are dynamic, evaluations may perhaps also shift overtime from individual to individual and from civilization to civilization. Customer’s perceptions of the service are based on quality and satisfaction not on some pre-determined intention criterion of what service is and should be [16].

Customer perceived service quality- Several research findings relating to quality have appeared in the past two decades, it is still substantial to notice here that there are several different conceptualizations of quality [31]. Within marketing and economics, quality frequently has been viewed as dependent on the level of product attributes. In operations management, quality is defined as having two chief dimensions, appropriateness of use and reliability (To what level is the item for use free from paucity). Quality is viewed as a general valuation in service literature [18]. The main inclusive definition of quality is the one proposed by Garvin [32] with the subsequent eight attributes: performance, features, conformance, reliability, durability, service ability, aesthetics and customer-perceived quality. Since for the attribute “performance”, network quality is used, because approximately all the participants in the focus groups and the pilot study believed, network quality is one of the most essential factors associated with the quality of mobile communication service. Further attributes can find their equivalents in related studies of customer perceived service quality.

Meaning and types of service expectations- Expectations are an indication point in opposition to which service delivery is compared is only a beginning. The level of expectation can contrast extensively depending upon the reference position the customer holds. Though most everyone has an instinctive sense of what expectations are, service marketers need a far more systematic and clear definition of expectation in order to understand measure and manage them [12].

Expected Service: Levels of Expectations- Consumers embrace dissimilar types of expectations about service. We focus on two types. The highest can be termed desired service: the level of service the customer hopes to accept- the “wished for” level of performance. Desired service is a combination of what the customer believes “know how to be” and “ought to be” [16]. Some authors argue that high expectations tend to produce more negative disconfirmation with low expectations generally more positive disconfirmation [33].

III. RESEARCH METHODOLOGY

To study Customer Service Quality expectations and perception in Telecom sector in Jammu and Kashmir, a questionnaire survey was conducted. The basic issues concerning the study's research design and methodology are discussed as:

Objectives of the Study- The proposed study attempts to attain the following objectives:

- To identify service provider Gap 5 being offered by Airtel and BSNL;
- To make comparison of customer service quality expectations and perceptions viz a viz Airtel and BSNL;
- To examine influence of various service quality dimensions on customer loyalty; and

Hypotheses of the study- This study intends to test the following hypotheses:

H₁: There is no significant difference between the expectations and perceptions of users of mobile phone service providers.

H₂: There is inverse relationship between reliability gap and customer loyalty.

H₃: There is inverse relationship between assurance gap and customer loyalty.

H₄: There is inverse relationship between tangibles gap and customer loyalty.

H₅: There is inverse relationship between empathy gap and customer loyalty.

H₆: There is inverse relationship between responsiveness gap and customer loyalty.

Sample- The selection of the sample was governed by the principles of proportionate Simple Random sampling, whereby, the four respondent categories- students, retailers and Government and Private office customers were taken one by one. After classifying each of the categories into various subgroups, care was taken that the number of items/respondents from each stratum is proportionate to the size of the stratum in relation to total population. Estimates of population based on the proportionate stratified sampling usually have greater precision (or smaller sampling error) than if, the whole populations were sampled by simple random sampling.

Data Collection- Survey method was adopted for collection of data and the survey instrument was hand distributed among the students, retailers, government and private officials in all the five districts of Kashmir division, the students, retailers, Government employees as well as private employees who are subscribers of BSNL and Airtel were contacted, who in turn proved instrumental in assembling the sample requirements already conveyed to them. In addition, the secondary data has been obtained from the file records of the constituent telecom departments, website of BSNL and Airtel, outlets of BSNL and Airtel, retailers, journals, books, past research done in the field, and other relevant sources.

The Research Instrument- Most of the instruments were either adopted from previous published works or developed specifically for the present study. The Likert's five-point scale is used throughout the study. The instruments used in this study for various constructs are explained as:

Service Quality dimension: The investigation involved modification of SERVQUAL, originally developed by Parasuraman, Zeithaml and Berry [8]. In related studies of market dimension, SERVQUAL consisting of 22 item scale is the most widely accepted and mostly used as it encompasses the dimensions of service quality— Reliability, Assurance, Tangibility, Empathy and Responsiveness.

Questionnaire was developed for customers using BSNL and Airtel service Provider. The items with respect to various dimensions were jumbled and arranged in a random order. As the main unit of analysis was the customer, all the twenty-two (22) items of service quality and five (5) items pertaining to customer loyalty were included in questionnaire. The respondents were as such asked to respond twenty-two (22) items dealing with customer expectations and perceptions, (5) items dealing with customer loyalty. Customer loyalty scale of Kaur and Soch[2] was adapted for the present study. Further, reliability was tested by Cronbach's alpha values. Table 1 shows the reliability and Inter-dimension correlations. The Cronbach's Alpha values (table 1) are also satisfactory, thereby, reflecting that the items imposed on a particular construct are consistently measuring that particular construct.

Table 1: Inter-dimension correlations and Cronbach's Alpha values

Constructs	1	2	3	4	5	6
1. Tangibility	1.00					
2. Reliability	0.41	1.00				
3. Responsiveness	0.36	0.34	1.00			

4. Assurance	0.39	0.41	0.41	1.00		
5. Empathy	0.34	0.40	0.39	0.42	1.00	
6. Customer Loyalty	0.29	0.31	0.28	0.33	0.26	1.00
Cronbach's Alpha	0.71	0.73	0.68	0.79	0.81	0.73

Source: Data compilation by the scholar for the present study

IV. ANALYSIS AND INTERPRETATION

As indicated in Table 2, it reflects the overall statistics based on expectations and perceptions of customers around the service quality dimensions. The mean score of expectations is high (a mean score of 3.63; %age mean score of 72.56%). Further, among the dimensions of service quality in expectations, empathy is spotted the highest (mean score of 3.93; %age mean score of 78.6% with a Standard deviation of 0.695), while tangibility has the lowest (mean score of 3.29; %age mean score of 65.8% with a Standard deviation of 0.853). Probing, further into the statements and their response to perceptions, the overall mean of perceptions is (a mean score of 2.86; %age mean score of 57.16%). Analyzing the service quality dimensions in perceptions, assurance is spotted highest (mean score of 3.32; %age mean score of 66.4% with a Standard deviation of 0.924), whereas empathy has the lowest (mean score of 2.13; %age mean score of 42.6% with a Standard deviation of 0.908).

Further the service quality gap is highest in empathy (service quality gap of -36.00%), and lowest in reliability (service quality gap of -6.60%) with an overall gap of (service quality gap of -15.4) which is obviously substantial. This means there is a significant gap between expectations and perceptions of service quality. Further the expectations and perceptions were compared using z test that indicate the overall difference of 15.4% is significant ($p < 0.05$) difference between customers' expectations and perceptions. Although, the expectations and perceptions are not significantly different with reference to reliability and assurance dimension. However, it is significantly different viz a viz other three (tangibility, empathy and responsiveness). The significance is ranging from (< 0.001 to < 0.05). Thus taking together the overall results, expectations and perceptions are significantly different well supported by statistical results. Therefore **H1**: There is no significant difference between the expectations and perceptions of users of mobile phone service providers is proved correct.

Table 2: Customers' Expectations cum Perceptions (Overall based on customers of BSNL and Airtel).

EXPECTATIONS					PERCEPTIONS				
S.no	Across dimensions of service providers gaps	Mean score	%age of Mean score	S.D	Mean score	%age of Mean score	S.D	Service providers Gap	Z values
1	Reliability	3.42	68.4	0.987	3.09	61.8	0.883	-6.60%	1.97 ^{ns}
2	Assurance	3.68	73.6	0.692	3.32	66.4	0.924	-7.20%	1.69 ^{ns}
3	Tangibility	3.29	65.8	1.035	2.78	55.6	0.765	-10.20%	2.07**
4	Empathy	3.93	78.6	0.695	2.13	42.6	0.908	-36.00%	2.12*
5	Responsiveness	3.82	76.4	0.910	2.97	59.4	1.004	-17.00%	2.18*
	Overall	3.63	72.56		2.86	57.16		-15.4	2.01**

Source: Survey Data Collected by the Scholar for the study. Note: * < 0.001 , ** < 0.05

Table 3 reflects the overall statistics related to customers' expectations and perceptions of BSNL customers. The overall mean of expectations is high (a mean score of 3.88; a %age mean score of 77.64%). Among the dimensions of service quality in expectations tangibility has highest (mean score of 4.03; %age mean score of 80.6% with a Standard deviation of 0.901), while as assurance has lowest (mean score of 3.78; %age mean of 75.6% with a Standard deviation of 0.872). Probing further into the results, the overall mean of customers perceptions is low (a mean score of 2.27; %age mean score of 45.4%), also among the dimensions of service quality in perceptions, assurance has highest (mean score of 2.68; %age mean score of 53.6% with a Standard deviation of 0.789), while as empathy has lowest (mean score of 1.78; %age mean score of 35.6% with a Standard deviation of 0.990).

Further the service quality gap is high in empathy. (Service quality gap of -41.80%), and least in assurance (service quality gap of -22.00%), with an overall gap of (Service quality gap of -32.24), which means there is substantial and significant gap between expectations and perceptions of service quality being offered by BSNL in the state of Jammu and Kashmir.

Table 3: Customers' Expectations cum Perceptions (Based on BSNL customers only)

EXPECTATIONS					PERCEPTIONS			
S.No	Across dimensions of service providers gaps	Mean score	%age of Mean score	Standard deviation	Mean score	%age of Mean score	Standard Deviation	Service providers Gap
1	Reliability	3.82	76.4	0.776	2.56	51.2	0.981	-25.20%
2	Assurance	3.78	75.6	0.872	2.68	53.6	0.789	-22.00%
3	Tangibility	4.03	80.6	0.901	2.23	44.6	0.887	-36.00%
4	Empathy	3.87	77.4	0.886	1.78	35.6	0.990	-41.80%
5	Responsiveness	3.91	78.2	1.039	2.10	42.0	1.375	-36.20%
	Overall	3.88	77.64		2.27	45.4		-32.24

Source: Survey Data Collected by the Scholar for the study.

Table 4 reflects the overall statistics related to customers' expectations and perceptions of Airtel customers. The overall mean of expectations is low (mean score of 3.374; %age mean score of 67.48%). Among the dimensions of service quality in expectations, empathy has highest (mean score of 3.99; %age mean score of 79.8% with a Standard deviation of 0.699), while as tangibility has lowest (mean score of 2.55; %age mean score of 51.0% with a Standard deviation of 0.860). Probing further into the statistics the overall mean of perceptions is high (a mean score of 3.446; %age mean score of 68.92). Also, among the dimensions of service quality, assurance has highest (mean score of 3.96; %age mean score of 79.2% with a Standard deviation of 0.728), while as empathy has lowest (mean score of 2.48; %age mean score 49.6% with a Standard deviation of 1.003). Further noticeably, a negative service quality gap in empathy (service quality gap of -30.20%), is the only dimension where there is area of attention for Airtel service providers.

Table 4: Customers' Expectations cum Perception (Based on Airtel customers)

EXPECTATIONS					PERCEPTIONS			
S.No	Across dimensions of service providers gaps	Mean score	%age of Mean score	Standard deviation	Mean score	%age of Mean score	Standard Deviation	Service providers Gap
1	Reliability	3.02	60.4	1.005	3.62	72.4	0.994	+12.00%
2	Assurance	3.58	71.6	0.983	3.96	79.2	0.728	+07.60%
3	Tangibility	2.55	51.0	0.860	3.33	66.6	1.010	+15.60%
4	Empathy	3.99	79.8	0.699	2.48	49.6	1.003	-30.20%
5	Responsiveness	3.73	74.6	0.891	3.84	76.8	0.969	+2.20%
	Overall	3.374	67.48		3.446	68.92		1.44

Source: Survey Data Collected by the Scholar for the study.

Table 5 reveals a comparative picture of customers actual perceptions viz a viz their two service providers i.e. BSNL and Airtel. The Table also indicates the magnitude of perceptual gap and its significance level by respective "p values". A mean score of moderate range perceptions (42% to 54%) of BSNL differs significantly from Airtel's high (49% to 77%). Considering mean score at the overall levels and dimensions of service quality (a difference of 23.52%, Z = 3.38, P Value = 0.032), as shown in the table the Airtel vs. BSNL difference remains significant as well as constant across all the dimensions of service quality.

Table 5: Comparison of customers Perceptions (Based on BSNL and Airtel customer's responses).

BSNL				AIRTEL				
S.No	Across dimensions of service providers gaps	Mean score Across dimensions	%age of Mean score	Mean score Across dimensions	%age of Mean score	Perceptual Gap in %age	Z value	Probability (P value)
1	Reliability	2.56	51.2	3.62	72.4	21.2	2.39	0.016***

2	Assurance	2.68	53.6	3.96	79.2	25.6	2.87	0.000**
3	Tangibility	2.23	44.6	3.33	66.6	22.0	5.34	0.005*
4	Empathy	1.78	35.6	2.48	49.6	14.0	3.73	0.001**
5	Responsiveness	2.10	42.0	3.84	76.8	34.8	4.46	0.000*
	Overall	2.27	45.4	3.44	68.92	23.52	3.38	0.032**

Source: Survey Data Collected By the scholar for the study. (*<0.0001, **<0.01, ***<0.05).

From a comparative point of view (table 6), the gaps across dimensions of service quality of BSNL is highest in empathy (-41.8%), and lowest in assurance (-22.0%), Further in Airtel empathy has highest gap (-30.2%), which indicates that there is a substantial and significant gap between service quality gap of BSNL and Airtel in area of empathy. However, Airtel is doing very well in other dimensions of services.

Table 6: A Comparison of Service Quality Gaps between BSNL & Airtel

S.No	Perception- Expectation(Gaps across dimensions)	BSNL in %age	Airtel in %age
1	Reliability	-25.20	(+)12
2	Assurance	-22.0	(+)7.6
3	Tangibility	-36.0	(+)15.6
4	Empathy	-41.8	(-)30.2
5	Responsiveness	-36.2	(+)2.2

Source: Data compilation by the scholar for the present study

As indicated in Table 7 reflects the service quality dimension as independent variable and customer loyalty as dependent variable. The statistics in Table 7 indicates R value as -0.36 showing the negative correlation between the predicted values and the observed values. Individually, all the dimensions negatively influence from a range of 0.28 to 0.42 which shows the inverse relationship. The negative influence is statistically supported by respective p values ranging from <0.05 to <0.001, thus clearly supporting the idea of dependence of customer loyalty on various service quality dimensions, thereby indicating inverse relationship. The results indicate more the gap, less will be the loyalty and vice versa. Tangibility has the least value as (-0.42) and assurance has the highest value (-0.28) of customer loyalty.

Table 7: Coefficients using path analysis between Service providers gaps and Customer loyalty.

S.No	Service Quality Gap Dimensions	Customer Loyalty
1.	Reliability	-0.37*
2.	Assurance	-0.28**
3.	Tangibility	-0.42*
4.	Empathy	-0.39**
5.	Responsiveness	-0.41**
	R	-0.36

Source: Survey Data Collected by the scholar for the study. Note :(*=< 0.001, **=<0.05).

Taking together the results, following hypotheses are well supported.

- H₁:** There is no significant difference between the expectations and perceptions of users of mobile phone service providers.
- H₂:** There is inverse relationship between reliability gap and customer loyalty.
- H₃:** There is inverse relationship between assurance gap and customer loyalty.
- H₄:** There is inverse relationship between tangibles gap and customer loyalty.
- H₅:** There is inverse relationship between empathy gap and customer loyalty.
- H₆:** There is inverse relationship between responsiveness gap and customer loyalty.

DISCUSSION AND CONCLUSION

The primary findings of this study indicate that there exists a significant gap between the expectations and perceptions of customers regarding the quality of service provided by the telecom operators under study. This gap is wider in BSNL as

compared to Airtel. Further, the results indicate inverse relationship of service quality dimensions (reliability, assurance, tangibility, empathy, and responsiveness) on customer loyalty. The results indicate more the gap, less will be the loyalty and less the gap, more will be the loyalty.

Two out of five dimensions of service quality (i.e. reliability and assurance) recorded insignificant difference between expectations and perceptions. The other three dimensions (i.e. tangibility, empathy, and responsiveness) show significant difference between customer expectations and perceptions. The service providers, therefore, appear to be performing the promised service dependably and accurately around the two dimensions. Also, the employees seem to have expected knowledge and courtesy to inspire trust and confidence among the customers. However, the results indicate that the physical facilities, equipment, employees' willingness to help customers, and the providing individualized attention to customers are falling short of customer expectation. Therefore, these areas need immediate managerial attention so as to deliver superior quality service to customers. This will not only result in improved customer loyalty but will also help in building long term profitable relationships with customers.

A comparison between Airtel and BSNL on the service quality dimensions reveals that BSNL is substantially lagging behind Airtel. Out of the five service quality dimensions, BSNL has achieved less than average score on all the five dimensions (less than three on a five point scale) while as Airtel recorded below average performance only on one dimension (empathy). The other four dimensions showed above average performance (greater than three on a five point scale). The same is also indicated by service quality gaps. In BSNL, all the five dimensions of service quality showed a negative service quality gap (i.e. expectations exceeding perception) with overall gaps recorded at -32.24%. On the other hand, only the empathy dimension of service quality showed a negative gap and all the other four dimensions showed a positive gap (i.e. perception exceeding expectation).

The above discussion leads us to infer that Airtel is vastly outperforming BSNL in terms of the quality of service delivered to customers. This stands evidenced by the difference in the overall service quality gap between Airtel (gap = +1.44%) and BSNL (gap = -32.24%). Therefore, BSNL authorities are required to pay earnest attention to explore the reasons for showing below average performance and take necessary measures to rectify them.

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