

# **A Study of Perceived Service Quality, Perceived Economic Value and Repurchase intention with Special References to BSNL Mobile Services.**

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## **1. Introduction**

At present, service marketing plays a major role in the national economy. In the service sector, telecom industry is the most active and attractive one. Its wider usage in personal life of the people, business field, political and economic environment is a remarkable one. It has made the people as close with each other. This sector ties the entire world by means of an invisible chain that has made the world as a large village in such a way that the people contact with each other from their dwelling place at the cheapest expense. Mobile telephony has become an important service in telecom industry and it is widely used worldwide.

In India cellular phones were introduced in the mid of the nineties in the metro cities but now most of the towns are connected by a cellular network including remote villages. Mobile phone services are becoming more and more significant throughout the world due to technological changes. As olins (1997) stated, the mobile communications industry has grown significantly and for a lot of people, mobile phones have become a very important part of their daily life. They carry them everywhere, along with their credit cards and house keys. Its wider usage in the personal life of the people, business field, political and economic environment is a remarkable one.

At present mobile telecom industry is under heavy competition. With the extensive mobile telecommunications usage, the mobile services market is now recognized as the most competitive part of the telecommunications sector. The emergence of a competitive markets has led to lower prices, which has also resulted in the widespread use, greater variety and quality of mobile services. In order to remain competitive, many enterprises intend to introduce innovative services to retain their customers. But service providers have limited direct contact with their customers. So it becomes difficult to retain their customer base. As

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## **2. Review of Literature**

A review of theoretical and empirical literature pertaining to the topic of the study is an integral part of any research work. Hence, an attempt has been made to present a review of various research studies relating to repurchase intention in the Telecom sector.

**Shueh-Chin Ting (2014)** carried out a research to identify the relationship between switching cost and customers' repurchase intention. In this study customer satisfaction divided into high, medium and low degrees. The result indicated that upon different degrees of satisfaction, there are different relationships between switching cost and customers repurchase intention. Specifically, with high or low customer satisfaction, there is no significant relationship between switching cost and customers' repurchase intention. Only with medium customer satisfaction, there is a significant and positive relationship between switching cost and customers' repurchase intention.

**Asiegbu Ikechukwu and Igwe Sunny et al. (2012)** investigated the antecedents of intention-to-use a particular Mobile Service among South-South University Lecturers in Nigeria. The factors consider for this is switching cost, customer service and social affinity. The analyses revealed that there exist a significant positive association between these variables and intention-to-use a particular mobile phone services among South-South University Lecturers in Nigeria.

**Arvind Malhotra and Claudia Kubowicz Malhotra (2015)** in their study explored the switching behaviour of mobile service customers in the USA with a focus on service quality, innovation and lock-in strategies as deterrents of switching. The study shows that mobile service quality (m-SERVQUAL) is a significant detractor of switching intentions of customers – if customers perceive their provider to be innovative, they are less likely to switch to another provider; the perception of being innovative is equally as important as the perception of the service quality delivered by the provider; hard lock-in (unreasonable contract length) leads customers to increase their intention to switch.

**Phillip Hellier and Gus Geursen et al. (2003)** conducted a study to develop a general service sector model of repurchase intention from the consumer theory literature. The model describes the extent to which customer repurchase intention is influenced by seven important factors – service quality, equity and value, customer satisfaction, past loyalty, expected to switch cost and brand preference. The analysis shows that the main factor influencing brand preference was perceived value with customer satisfaction and expected switching cost having less influence.

**Evangelia Biery (2003)** examined the factors influencing customers' repurchase intentions in the Greek Mobile Telephony sector. The main factors such as service quality, price, risk, service value, customer satisfaction and their relationships were closely examined. The findings showed that perceived value and perceived price were associated with repurchase intention. However, perceived risk did not prove to influence customers' repurchase intention. The research results also showed that perceived service quality and customer satisfaction influenced repurchase intention.

From the review of studies cited above, it can be found that there exists linkages between perceived service quality, perceived economic value and repurchase intention. The literature still lacks a comprehensive study establishing the combined influence of perceived service quality and perceived economic value on repurchase intention. Therefore, there is a need to examine the influence of perceived service quality and perceived economic value on repurchase intention of customers. Hence, the present study fills this gap in research.

### **3. Statement of the Problem**

The Telecommunication industry in India has developed to be very competitive. With the extensive mobile telecommunications usage, the mobile services market is now recognized as the most competitive part of the telecommunications sector. Advanced technology, innovation of products and services, more number of telecom players makes this sector highly competitive. Competitors frame a number of strategies in order to attract the customers as well as retain the existing customers. Rising wealth, product proliferation, regulatory changes and newer technologies are together making switching easier for customers.

One of the key challenges confronting these Telecommunication companies is how they manage their existing customers, which holds a great importance to customers repurchase intention. Customer repurchase intention in the mobile telephony sector refers to the users' intention to continue to repurchase the service from their mobile operator and not switch to another operator even after their contract expires. As Phillip Hellier and Gus Geursen et al. (2003) claimed that service quality is an important factor to keep customers and it increases the customers' repurchase intention. Perceived value is another factor that affects customers' repurchase intention (Evangelia Biery, 2003). Sweeney and Soutar's (2001) in their work proposed four dimensions of perceived value such as quality, economic, emotional and social value. But the present study adopts only one dimension of perceived

value i.e., economic value, which is most relevant to mobile service experience. In this case economic value is related to perceived economic benefits received in comparison to a monetary cost of the services. But, there was no specific study conducted by taking all these variables together. Therefore there is a need to study the relationship between perceived service quality, perceived economic value and repurchase intention. Five major mobile phone service providers are Airtel, BSNL, Tata, Vodafone and Idea, among them BSNL have been chosen for the study. Because BSNL being the only one public sector Telecom company in India. Hence, the present study is to examine the influence of service quality and economic value on repurchase intention of customers of BSNL mobile services.

#### **4. Objective of the Study**

The main aim of the study is to examine the influence of perceived service quality and perceived economic value on repurchase intention of customers of BSNL mobile services.

#### **5. Hypotheses of the Study**

The present study frames the following two hypotheses on the basis of objectives of the study.

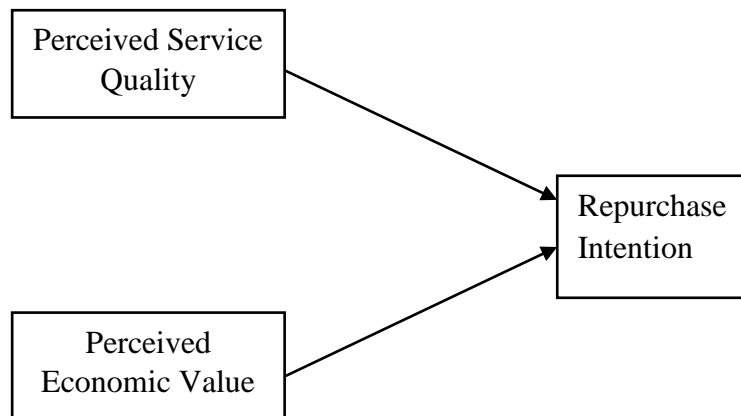
**H1--** There exists a significant positive relationship between perceived service quality and repurchase intention.

**H2--** There exists a significant positive relationship between perceived economic value and repurchase intention.

#### **6. Conceptual model**

Based on the literature review, various concepts related to customer satisfaction were identified. Thereafter the conceptual framework was developed as shown in figure 1.

#### **Conceptual Model of the Study**



**Figure 1**

## **7. Research Methodology**

The methodology is the attempt to validate the rationale behind the selected research design and provide justification of why it is appropriate in solving the selected research problem. The present study is explanatory in nature and both secondary and primary data were collected and used for the study. The secondary data sources for the study include books, journals, periodicals, TRAI reports, BSNL publications etc. The primary data required for the study were collected from individual customers of BSNL mobile service of Ernakulam Telecom Division.

The population of the study is BSNL mobile service users of Ernakulam Telecom Division of Kerala, India. The size of the population of the study is large. As it is a large one to be managed, sampling method has been adopted. Purposive sampling method was adopted for selection of respondents for the study. And 240 sample were collected from the individual customers. Primary data were collected using questionnaire developed after a pilot study. The questionnaire developed for collecting data from individual customers was finalised after conducting a pilot study among 50 individual customers of BSNL mobile service of Ernakulam Telecom Division. The data collected for the study were tabulated and analysed using Statistical Package for the Social Sciences (SPSS) to get the outcome of the result of descriptive statistics and inferential analysis. WarpPLS 4.0 software was used to test the overall fitness of the Structural Equation Model (SEM).

## **8. Analysis and Results**

### **8.1 Profile of the Respondents**

The data required for the study were collected from 240 individual customers of BSNL Ernakulam Telecom Division. Their gender, age, educational qualification, occupational status, employment, and monthly income have been analysed and presented in Table 1.

#### **8.1.1 Gender**

On the basis of gender, respondents are grouped into two categories, male and female. Out of the 240 respondents, 127 (53 per cent) are male and 113 (47 per cent) are female. From the analysis it is clear that, majority of the sample respondents are male.

#### **8.1.2 Age**

Age is an important attribute to fix the consumer decisions and it plays a role in decisive status in the case of selecting a service provider. Age wise classification of the respondents covered under the study shows that 90 (37.5 per cent) are in the age group 20-30, 50 (20.8 per cent) are in the age group of 30-40, 42 (17.5 per cent) are in the age group of 40-50 and 58 (24.2 per cent) are in the age group of 50 and above. From the analysis it is to be concluded that, majority of the sample respondents belongs to the age group 20-30.

#### **8.1.3 Educational Qualification**

Educational qualification is a factor that fixes purchase decision and satisfactory level. It takes a constant role in consumer behaviour. It is to be noted that, 34.6 percentage of the respondents have SSLC qualification. Respondents having plus two come next and they share the per cent i.e., 26.3. Then the rest of the respondents have degree (11.3 per cent), master degree (21.7 per cent), professional qualification (2.9 per cent) and above master degree (3.3 per cent). So, it is clear that majority of the sample respondents have school level education. Thus, majority, 83 (34.6 per cent), of the respondent covered under the study are having school level of educational qualification.

#### **8.1.4 Occupational Status**

Occupation demands different types of goods and services so that it takes into consideration in consumer studies. Based on the observations from the Table 1 shows that, 46.3 percentage of the respondents belongs to the employed category. Students come next and they form 45.4 per cent and the rest of the respondents (8.3 percentage) come in

unemployed category. From the analysis it is clear that, majority of the sample respondents are employed people and they are using BSNL mobile service in their daily life.

**Table 1**  
**Demographic Profile of the Sample Respondents**

Variables		Frequency	Percent
<b>Gender</b>	Male	127	53
	Female	113	47
	<b>Total</b>	<b>240</b>	<b>100.0</b>
<b>Age</b>	20 – 30	90	37.5
	30 - 40	50	20.8
	40 – 50	42	17.5
	50 & above	58	24.2
	<b>Total</b>	<b>240</b>	<b>100.0</b>
<b>Educational Qualification</b>	SSLC	83	34.6
	Plus Two	63	26.3
	Degree	27	11.3
	Master Degree	52	21.7
	Professional	7	2.9
	Above Master Degree	8	3.3
	<b>Total</b>	<b>240</b>	<b>100.0</b>
<b>Occupational Status</b>	Employed	111	46.3
	Un Employed	20	8.3
	Student	109	45.4
	<b>Total</b>	<b>240</b>	<b>100.0</b>
<b>Employment</b>	Govt / semi govt service	59	24.6
	Private service	24	10.0
	Own business	18	7.5
	Others	10	4.2
	Not applicable	129	53.8
	<b>Total</b>	<b>240</b>	<b>100.0</b>
	Less than 10000	33	13.8
	10000 – 20000	37	15.4



<b>Monthly Income (in RS.)</b>	20000 – 30000	13	5.4
	30000 – 40000	9	3.8
	40000 & above	22	9.2
	Not applicable	126	52.5
	<b>Total</b>	<b>240</b>	<b>100.0</b>

**Source: Field Survey**

#### **8.1.5 Type of Employment**

Employment is a factor that fixes purchase decision and satisfactory level. It takes a constant role in consumer behaviour. On the basis of the occupation of the respondents, 59 (24.6 per cent) are government employees, 24 (10.0 per cent) are private employees, 18 (7.5 per cent) are engaged in own business, 10 (4.2 per cent) are engaged in others occupations. So the conclusion is that, most of the sample respondents were working in govt/semi govt service. Thus, majority, 59 (24.6 per cent), of the respondent covered under the study are government employees.

#### **8.1.6 Annual Income of the Customers**

It is needless to mention that the income is the major determining factor that influences buying decision of the consumers. In the case of using BSNL mobile service, it is essential to have a particular level of income then only, the Consumers can maintain it accordingly. As far as the monthly income is concerned, the majority of the respondents (15.4 per cent) have the monthly income between 10000 and 20000 and 13.8 percentage of the respondents earn less than 10000 as their monthly income. Larger income Rs.40000 & above is the group, that form 9.2 percentage. From the analysis it is to be concluded that, majority of the sample respondents belongs to the income group 10000-20000.

### **8.2 Usage of the Mobile Services**

The following section pays its concentration on the details of usage and practice of the mobile service of the selected customers of the BSNL Ernakulum Telecom Division. It is presented in Table 2.

### **8.2.1 Period of Using Mobile Services**

Based on the observations from the Table 2 shows that, 29.6 percentage of the sample respondents using BSNL mobile service for the period of 6 years and above. Then the 26.7 percentage of the respondents using BSNL mobile service for the period of less than 2 years. This shows that the customers have obtained the BSNL mobile service recently. At the same time, 23.8 percentage of the respondents using the BSNL mobile service for the period of 2 – 4 years and the rest of the customers fall in the category of 4 – 6 years. From the analysis it is clear that, majority of the sample respondents using BSNL mobile service for the period of 6 years and above.

**Table 2**  
**Details of Usage of the Mobile Services**

<b>Variables</b>		<b>Frequency</b>	<b>Percent</b>
<b>Period of Using BSNL Mobile Service (in years)</b>	0 - 2	64	26.7
	2 – 4	57	23.8
	4 - 6	48	20.0
	6 & above	71	29.6
	<b>Total</b>	<b>240</b>	<b>100.0</b>
<b>Type of Connection</b>	Pre-paid	215	90
	Post-paid	25	10
	<b>Total</b>	<b>240</b>	<b>100.0</b>
<b>Mode of Payment of Bill</b>	Counter payment in the BSNL office	23	9.6
	Through bank account	2	0.8
	Through post-office	0	0
	Not applicable	215	89.6
	<b>Total</b>	<b>240</b>	<b>100.0</b>

### **8.2.2 Type of Mobile Connection**

The BSNL offers pre-paid as well as post-paid connection for the mobile users. Both are for the convenience to the customers. Prepaid is the type of connection, which has possessed by the majority (90 per cent) of the surveyed mobile customers. And 10 per cent of the customers have post-paid connection and this is the traditional method of mobile connection. From the analysis it is to be concluded that, majority of the sample respondents demand prepaid connection.

### **8.2.3 Mode of Payment of Bill**

This is applicable in case of post-paid customers only. The BSNL offers different ways to pay the bill for its customers. It collects the amount from the customers in its counter at the offices and it is the traditional way of collecting the bill amount. Now payment through post-office, bank account, ATM and online are also accepted by the BSNL. In case of payment of bill, majority of the sample respondents (9.6 per cent) uses the counter payment method. And the rest of them make payment through bank account (0.8 per cent). It implies that majority of the sample respondents makes payment through counter offices.

### **8.3 Model Validation - Model Fit Indices and P values**

To assess the model fit with the data, it is recommended that the p- values for both the average path coefficient (APC) and the average R- square (ARS) be both lower than 0.05. It is also recommended that the average variance inflation factor (AVIF) be lower than 5 (Kock, 2012). Table 3 below provides the model fit indices with p values of the estimated model. It was found that, all the three fit criteria were met and hence it was assumed that model had acceptable predictive and explanatory quality as the data is well represented by the model.

**Table 3**  
**Model fit indices and p values**

Average path coefficient (APC) = 0.402, $P < 0.001$
Average R-squared (ARS) = 0.541, $P < 0.001$
Average block VIF (AVIF) = 1.816, acceptable if $\leq 5$ , ideally $\leq 3.3$

#### **8.3.1 Latent Variable Coefficients of Measures**

In Table 4, R-squared and Q-squared coefficients are provided only for endogenous latent variables; and reflect the percentage of explained variance and predictive validity associated with each of those latent variables, respectively. Composite reliability and Cronbach's alpha coefficients are provided for all latent variables; these are measures of reliability. Average variances extracted (AVE) and full collinearity variance inflation factors (vifs) are also provided for all latent variables; and are used in the assessment of discriminant validity and overall collinearity, respectively. All the values of measures satisfy the acceptance criteria.

**Table 4**  
**Latent variable coefficients**

<b>Measures</b>	<b>Perceived service quality</b>	<b>Perceived economic value</b>	<b>Repurchase Intention</b>
R - squared			0.541
Composite reliability	0.945	0.927	0.907
Cronbach's alpha	0.937	0.896	0.845
Average variances extracted	0.490	0.762	0.766
Full collinearity VIFs	1.907	1.867	2.114
Q - squared			0.538

### **8.3.2 Path Coefficients and P values**

The estimated model with path coefficients and corresponding P values are provided in Figure 2.

In PLS based SEM analysis, path coefficients are referred to as beta ( $\beta$ ) coefficients. The explanatory power of the structural model is evaluated by examining the squared multiple correlation ( $R^2$ ) value of the dependent constructs. The R squared coefficient measures the percentage of variation that is explained by the model.

### **Structural Model Analysis – Repurchase Intention**

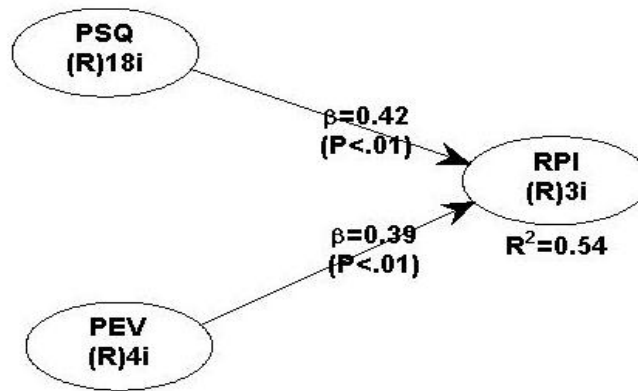


Figure 2

The two variables perceived service quality and perceived economic value together explained 54 percentage of the variation in repurchase intention. Perceived service quality and perceived economic value were found to have a significant influence on repurchase intention ( $p<0.01$ ). Perceived service quality has positive relationship ( $\beta=0.42$ ) with repurchase intention which indicates that as the perceived service quality increases the repurchase intention also increases. Hence, the hypothesis **H1, There exists a significant positive relationship between perceived service quality and repurchase intention is accepted.**

Perceived economic value has also positive relationship ( $\beta=0.39$ ) with repurchase intention which indicates that as the perceived economic value increases the repurchase intention also increases. Hence, the hypothesis **H2, There exists a significant positive relationship between perceived economic value and repurchase intention is accepted.** From the analysis it is evident that, perceived service quality has strong influence on repurchase intention.

## 9. Conclusion

The purpose of the study was to examine the influence of service quality and economic value on repurchase intention of BSNL mobile services. The analysis shows that perceived service quality and perceived economic value were found to have a significant influence on repurchase intention. Perceived service quality has positive relationship with repurchase intention which indicates that as the perceived service quality increases the repurchase intention increases. Perceived economic value has also positive relationship with

repurchase intention which indicates that as the perceived economic value increases the repurchase intention increases.

The findings suggest that, BSNL should implement service quality improvements like offering excellent coverage, increase the speed of wireless internet and improve training and development of their staff etc. and the manager should consider these factors in order to retain their customer base.

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