

A STUDY ON FRAMEWORK AND EFFECT OF SERVICE QUALITY ON CUSTOMER SATISFACTION TOWARDS TELECOM NETWORKS IN TIRUCHIRAPPALLI REGION

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Abstract: This study examines the effect of Service Quality towards customer satisfaction in Indian Telecom providers especially in Trichirappalli region. After the study about Service quality in literature and various reports, the problem is identified as Gap in Service quality. Data is collected through questionnaire to 200 respondents in and around Trichy region. Chi-Square test is used to test hypothesis. The result of the study explained the relationship between service quality and customer satisfaction. Factor analysis, percentage and gap analysis is used to find out the result. This paper is an attempt the service quality and its gap occurred in the Telecom network provider in Trichy region.

Keywords: Service Quality, Telecom Sector, Customer Satisfaction and Factors.

1. Introduction

Service quality is defined as "Conformance to requirements." (Crosby 1979). "Service quality is a measure of how well the service delivered matches customer expectation. Delivering quality service means conforming to customer expectations on a consistent basis" (Lewis and Booms 1983). The search for quality is arguably the most important consumer trend of the 1980s (Rabin 1983) Service quality perceptions results from a comparison of consumer expectations with actual service performance (A.Parasuraman et al 1985).service concern of highest priority to today's companies is the impact of service quality on profit and other financial outcomes of the organisation (Gresing 1994; Rust, Zahorik, and Keiningham 1995).

Measuring service quality is a challenge because customer satisfaction is determined by many intangible factors. Service quality contains many psychological features (Fitzsimmons, 2006). Quality is a comparison between expectations and performance (Zeithaml, 1985). A set of key discrepancies or gaps exists regarding executive perceptions of service quality and the tasks associated with service delivery to consumers.

These gaps can be major hurdles in attempting to deliver a service which consumers would perceive as being of high quality (Parasuraman et al, 1985).

2. Objectives

- To Study the Service Quality and its impact in Telecom sector's mobile connection.
- To Measure the Service Quality in Mobile Network connection.
- To analyze the relationship between demographic variables and the view of customer about their perceived services.
- To analyze the relationship between Socio-economic factors and the service quality variables.
- To give suggestions to improve Service Quality in Telecom industry (Mobile connection).

3. Literature Review

A. Parasuraman et al., focused the growing interest towards Service Quality. The author conducted an empirical study that evaluated the three formats in four different sectors. The findings highlight the importance of considering practical usefulness in assessing alternative service quality scales.

Prabha Ramsook et al., attempt to extend the service quality within public services provided by front-line employees. The author used SERVQUAL instrument to find the customer expectations. The dimensions which is used by the front-line employees can be measured.

A. Parasuraman et al., explained in their paper about the service standards which can be measured in future research. In that paper the author used SERVQUAL to measure the service quality standard. The author discussed C&T's concerns and then the issues raised by Teas. Then they concluded the relationship between service quality and customer satisfaction.

According to Babu et al., service quality leads the business performance and paradigm shift for top-most competitive priorities. The authors tried to meet the customer perception of service quality with the customer expectation.

Saowanee Srikanjanarak et al., explained in their paper about the Value added services and customer perspective. The author aimed to conceptualize the service quality model and current market situation. By using questionnaire the author identified the customer's perception on value added services offered by the service provider.

Malik tried to find out the perceived service quality using SERVQUAL and the role of perceived value as a mediating variable in the service sectors in Pakistan. The author strongly suggested that the customer perception directly correlate with the satisfaction. The author suggested the customer satisfaction and the factors involved in customer evaluation.

A. Parausraman et al., explained about the service quality and its critique of SERVQUAL's difference-score conceptualization. The author suggested richer diagnostics about service quality. The authors compared the scores of both perception and SERVQUAL with the five service quality dimensions.

Siew-Phaik Loke et al., aimed to examine the impacts of reliability, responsiveness, assurance, empathy and tangible aspects on customer satisfaction. The authors used Gap analysis to determine the perceived importance and satisfaction on each dimension on service quality.

According to Dr. Muhammad Ehsan Malik et al., the author tried to achieve customer satisfaction by using service quality. Data is collected by the author and provide the result of the customer perception. The author concluded that the customer satisfaction and service quality improve the high market share.

Bindu Narayana et al., explained the measure of benchmarking on service quality. The author developed the service quality dimensions with benchmarking estimation. The performance is measured by the authors and find out the factor which affects the service quality.

K. Osotimehin et al., examines the customer perception of service quality in service quality in the Nigerian Telecommunication Sector. Data is collected through questionnaire from university students. The author revealed that the service provider in terms of prompt service delivery, reliability, improve service,

availability of effective and efficient customer care to assist customers help in assessing their rate of satisfaction.

4. Research Methodology

4.1 Research Design: A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure.

4.2 Type Of Study: Descriptive research - surveys and fact-finding enquiries of different kinds. The research problem is described by the researcher using questionnaire and schedule.

4.3 Sampling Design: The sampling design of the study is convenience sampling.

Sampling Element: Customers of Mobile Networks

Sample Size : 200

Sampling Method : Convenience Sampling

Sample Media : Questionnaire

4.4 Data Collection Methods: The nature of data used may be primary or secondary. Primary data is the first hand collection of information. Secondary data is making use of published or from published sources.

Primary Data: Primary data are fresh data collected through survey with the customers of Mobile Networks through questionnaire.

Secondary Data: Secondary data are collected from internal source, books and various journals to make a conceptual framework regarding research problem.

4.5 Questionnaire: SERVQUAL - Questionnaire is the most popular and widely adopted instrument for gathering data. A questionnaire is a sheet of papers consisting questions relating to certain aspects regarding which the researcher collects the data. The questionnaire is given to the respondent to be filled up. The success of survey methods depends on the strength of the questionnaire use.

5. Analysis and Interpretation

5.1 Reliability: The reliability of these questionnaire is measured by using SPSS software. It is measured as Cronbach's Alpha = .806. It is defined in percentage as 80.6%. It is fact that more than 70% is reliable one. So, the response of the Questionnaire is reliable one.

5.2 Percentage analysis: From the analysis of network usage by the respondents are given below. 25.5% of the respondents use Aircel, 38% using Airtel, 15% BSNL,

6.5% using Docomo, 9% using Idea, 1.5% using Reliance CDMA/GSM and 4.5% using Reliance-Jio.

Table 1. Percentage Analysis

| Network | Frequency | Percent |
|--------------|-----------|---------|
| Aircel | 51 | 25.5 |
| Airtel | 76 | 38.0 |
| BSNL | 30 | 15.0 |
| Docomo | 13 | 6.5 |
| Idea | 18 | 9.0 |
| Reliance | 3 | 1.5 |
| Reliance-Jio | 9 | 4.5 |
| Total | 200 | 100.0 |

5.3 Factor analysis: Factor analysis is used to reduce the dimensions of used variables. From the factor analysis for this questionnaire, the following result is obtained.

The factor value is determined by the iterations which we obtained. Rotated component matrix explains the deduction of variable in order to the sorted value of its component. Five factors are formed. The conversion of eighteen variables into five factors are listed below diagram.

Table 2. Factor Analysis

Rotated Component Matrix^a

| | Component | | | | |
|-------------------------------|-----------|-------|-------|-------|-------|
| | 1 | 2 | 3 | 4 | 5 |
| Knowledge_of_ccare | .773 | .140 | .083 | .080 | -.017 |
| response_to_complaints | .740 | .300 | -.047 | .037 | .193 |
| attention_to_problem | .713 | .110 | .121 | .222 | -.079 |
| ease_to_contact_customer_care | .605 | .138 | .172 | .064 | .318 |
| comparison_of_call_rate | .484 | -.348 | .187 | .157 | -.047 |
| Satisfaction | -.035 | .759 | .089 | .249 | .212 |
| operating_hours | .265 | .620 | .058 | .000 | .131 |
| clean_neat_appearance | .215 | .559 | .220 | -.123 | -.419 |
| individual_attention | .249 | .457 | .043 | .299 | -.015 |
| clarity_of_call | .126 | .032 | .790 | .017 | .266 |
| quality_of_connection | .093 | -.018 | .723 | .277 | .110 |
| signal_strength | .052 | .507 | .667 | .005 | -.143 |
| speed_of_data_connection | .312 | .245 | .421 | .404 | -.159 |
| affordable_cost | .036 | .072 | .129 | .711 | .355 |
| cost_of_data_connection | .127 | .387 | -.125 | .682 | .029 |
| accurate_call_rate | .176 | -.088 | .248 | .634 | .027 |
| schemes_offers_intimation | .094 | .030 | .363 | .397 | -.094 |
| Trust | .179 | .157 | .172 | .103 | .764 |

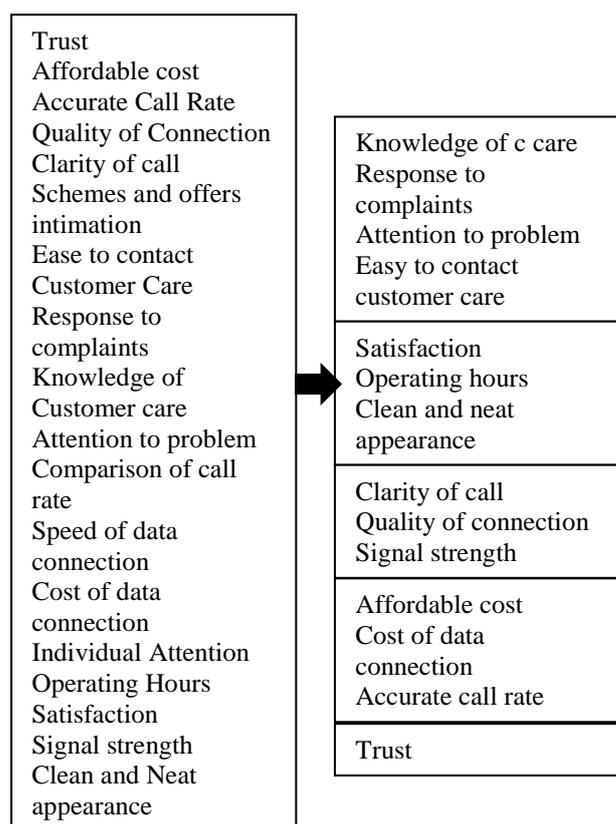
Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 11 iterations.

| Cross tabulation | Trust | | | | Total |
|------------------|----------------|-------|---------|----------|-------|
| | strongly agree | Agree | neutral | Disagree | |
| Aircel | 6 | 34 | 9 | 2 | 51 |
| Airtel | 13 | 50 | 11 | 2 | 76 |
| BSNL | 7 | 20 | 3 | 0 | 30 |
| Docomo | 3 | 8 | 2 | 0 | 13 |
| Idea | 3 | 10 | 4 | 1 | 18 |
| Reliance | 1 | 0 | 2 | 0 | 3 |
| Reliance-Jio | 2 | 5 | 2 | 0 | 9 |
| Total | 35 | 127 | 33 | 5 | 200 |

Figure 1. Proposed Model



5.4 Chi-Square: Chi-Square analysis is used to find the relationship between the variables we used.

H₀: There is no relationship between type of network used and trust towards the network provider.

H₁: There is a relationship between type of network used and trust towards the network provider.

Table 3. Chi-Square Test

| | |
|-------------------|---------------|
| Calculated Value | = 13.287 |
| Degree of freedom | = (5-1)*(5-1) |
| | = 4*4 |
| | = 16 |
| Tabulated Value | = 26.30 |

Calculated value is less than tabulated value. So H_0 is accepted.

5.5 Satisfaction level: The satisfaction level of the respondents towards the network provider is given below table.

Table 4. Percentage Analysis: Satisfaction

| S.No | Particulars | Frequency | Percent |
|------|---------------------|-----------|---------|
| 1 | Highly satisfied | 15 | 7.5 |
| 2 | Satisfied | 109 | 54.5 |
| 3 | Neutral | 56 | 28.0 |
| 4 | Dissatisfied | 15 | 7.5 |
| 5 | Highly dissatisfied | 5 | 2.5 |
| | Total | 200 | 100.0 |

From the satisfaction level of the network provider, it is found that 7.5% respondents are highly satisfied, 54.5% of the respondents are satisfied, 28% of the respondents are neutral, 7.5% of the respondents are dissatisfied and 2.5% of the respondents are highly dissatisfied.

5.6 Gap analysis: Gap is mentioned as the lagging of expected and perceived service. The expectation may be considered as the respondents are satisfied with the network. So the gap is found as 38%. This indicates the low level of Gap in the customer satisfaction towards the networks.

6. Result and Discussion

From the research, 25.5% of the respondents use Aircel, 38% using Airtel, 15% BSNL, 6.5% using Docomo, 9% using Idea, 1.5% using Reliance CDMA/GSM and 4.5% using Reliance-Jio.

The total of eighteen variables are reduced in five factor. Service quality in general needs ten factors to be determined. From the factor analysis it is focused that

only five factors are considered for the telecom sectors service.

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Gap analysis is used to find the gap of satisfaction. The gap is found as 38%.

7. Future Direction

Present research is geographically restricted in Tiruchirappalli district only. Hence the result cannot be exploited to other places. One of the biggest limitations with the paper work is the time factor. The sample size is small due to insufficient time allotment.

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