SERVICE QUALITY GAPS IN CELLULAR TELECOMMUNICATION SERVICE PROVIDERS
(A Study with Reference to –Andhra Pradesh)

Dr.Vijay Kumar
Assistant Professor
RGM College, Nandyal-A.P

Nagaraju .Kolla
Research Scholar
Sri Krishna Devaraya Institute of management (SKIM)-A.P

Dr.ADINARAYANA
Assistant Professor
MITS College, Madanapally-A.P

Abstract: Success of the Service organization depends on many factors, among them Service Quality is a major factor. But it is somewhat difficult to measure Service Quality Because Of Intangibility, Inconsistence, Inseparability and Non Inventory. Among the measurement models available for measuring service quality SERVQUAL MODEL is more accepted in research and Industry. The main objective of this study is to measure Service Quality (withSERVQUAL) of cellular telecommunication service providers in Andhra Pradesh. For this study Reliability analysis, Factor analysis and paired t-test were employed. This Feed is useful for cellular telecommunication service providers while formulating strategies for Success.

Key words: Service Quality, SERVQUAL MODEL, Reliability analysis, Factor analysis, paired t-test,

Introduction

Cellular telecommunication service providers:
In Developing countries like India Cellular telecommunication sector play a vital role in economic growth (Graph-1). Along with the economic growth Cellular telecommunication sector also provide competition. There is a immense competition among the players like AirtelVodafone, Reliance Communications, Idea Cellular, BSNL, Tata DoCoMo, Virgin Mobile, Aircel, Uninor MTS India etc.

Service Quality Importance:
Nowadays service quality has become one of the important determinants in measuring the success of industries. Marketers agree that service quality has truly presented a significant influence on customers to distinguish competing organizations and contribute effectively to customer satisfaction (Parasuraman, Zeithaml, and Berry, 1985; Mersha, 1992; Avkiran, 1994; Marshal and Murdoch, 2001).Service Quality foster customer loyalty (Heskett et al, 1997), and ultimately impacting upon ‘long-term market share and profitability (Yang and Chen, 1991). Among the models SERVQUAL model is mostly accepted model for measuring service quality

SERVQUAL model
Parasuraman et al. (1985) proposed that service quality is a function of the differences between expectation and performance along the quality dimensions. They developed a service quality model

The various gaps visualized in the model are:

Gap 1: Difference between consumers’ expectation and management’s perceptions of those expectations, i.e. not knowing what consumers expect

Gap 2: Difference between management’s perceptions of consumer’s expectations and service quality specifications, i.e. improper service-quality standards
Gap 3: Difference between service quality specifications and service actually delivered i.e. the service performance gap

Gap 4: Difference between service delivery and the communications to consumers about service delivery, i.e. whether promises match delivery?

Gap 5: Difference between consumer’s expectation and perceived service this gap depends on size and direction of the four gaps associated with the delivery of service quality on the marketer’s side.

According to this model, the service quality is a function of perception and expectations and can be modeled as:

\[ SQ = \sum_{j=1}^{k} (P_{ij} - E_{ij}) \]

Where:

SQ overall service quality; \( k \) number of attributes

\( P_{ij} \) Performance perception of stimulus i with respect to attribute j

\( E_{ij} \) Service quality expectation for attribute j that is the relevant norm for stimulus i

(Diagram-1)

Statement of the Problem
Along with the economic growth Cellular telecommunication sector also provides competition among players. Their competition mainly based on service quality. So in winning competition they need to consider Service quality.

Objectives of the Study
The main objectives of the study are

1) To know socio-economic profile of the respondents
2) To Study Service Quality gaps in Cellular telecommunication sector

Hypotheses
Based on the objectives the following hypotheses were formulated

1) \( H_0 \) There is no significant difference between customer expectation and perception in terms of tangible dimension
2) \( H_0 \) There is no significant difference between customer expectation and perception in terms of reliability dimension
3) \( H_0 \) There is no significant difference between customer expectation and perception in terms of empathy dimension
4) \( H_0 \) There is no significant difference between customer expectation and perception in terms of Assurance dimension
5) \( H_0 \) There is no significant difference between customer expectation and perception in terms of responsiveness dimension

Methodology of Study:
For this study the following methodology is followed

Sampling Method : Stratified Sampling
Sample Size : 412 (Kurnool=144, Rangareddy=138 East Godavari=130)
Primary Data : Questionnaire.

Data analysis : Percentages, Reliability analysis, Factor analysis, paired t-test,
are applied for data analysis
Demographics
Demographics of the respondents for this study are as follows. Gender: Males 287 with Females125, Education: Up to Inter/Diploma=148, UG=197, PG and above=70, Age 30 and below =112, 31-40years=174, 41 and above=126, Income Levels: Below 200000= 78, 200001-300000=122, 300001-400000=161,400001 and above =51, Marital Status: Married= 258 unmarried=154

Goodness of the Data:
Validity
Validity of the questionnaire was assessed by Factor analysis (Exploratory) .Exploratory Factor Analysis was extracted five dimensions in both Perceptions and Expectations .Named them as Tangibles, Reliability, Responsiveness, Assurance and EmpathyBartlett’s test of sphericity is significant p<.04, and KMO (Kaiser-Meyer-Olkin) value .7 for Expectations and for Perceptions Bartlett’s test of sphericity is significant p<.031, and KMO (Kaiser-Meyer-Olkin) value .8

Reliability
Reliability test was administered to establish the goodness of data. In statistics, reliability is the consistency of a set of measurements. For this study Cranach’s Alpha coefficient was calculatedCranach’s alpha for all dimensions is more than .70 hence the data is reliable for further analysis (Table-1)

Service quality gaps
From table -2 it is interpreted that in all dimensions have service quality gaps but it is serious in Responsiveness followed by Assurance, Tangibles, Empathy and Reliability

Hypotheses
Hypothese-1
H₀: There is no significant difference between customer expectation and perception in terms of tangible dimension
Interpretation:
Significance value is <.05 hence Null Hypotheses is rejected and interpreted that there is difference between customer expectation and perception in terms of tangible dimension (From table-3)

Hypothese-2
H₀: There is no significant difference between customer expectation and perception in terms of reliability dimension
Interpretation:
Significance value is <.05 hence Null Hypotheses is rejected and interpreted that there is difference between customer expectation and perception in terms of reliability dimension (From table-3)

Hypothese-3
H₀: There is no significant difference between customer expectation and perception in terms of empathy dimension
Interpretation:
Significance value is <.05 hence Null Hypotheses is rejected and interpreted that there is difference between customer expectation and perception in terms of empathy dimension (From table-3)

Hypothese-4
H₀: There is no significant difference between customer expectation and perception in terms of Assurance dimension
Interpretation:

Significance value is <.05 hence Null Hypotheses is rejected and interpreted that there is difference between customer expectation and perception in terms of Assurance dimension (From table-3)

Hypothesis-5

H0: There is no significant difference between customer expectation and perception in terms of responsiveness dimension

Interpretation:

Significance value is <.05 hence Null Hypotheses is rejected and interpreted that there is difference between customer expectation and perception in terms of responsiveness dimension (From table-3)

Conclusion:

All dimensions have service quality gaps but it is serious in Responsiveness followed by Assurance, Tangibles, Empathy and Reliability. Cellular telecommunications competition mainly based on service quality. So in winning competition they need to consider above Service quality gaps

Limitations

1. Sample size was limited to 412 because of limited time which is small to represent the Whole population

2. The research was limited to Andhra Pradesh only and if the same research would have been Carried in another area, the results may differ but care has been taken

References

Graph-1

Contribution to GDP by Indian mobile operators (Cr)

Source: GSMA Intelligence; BCG Analysis
SERVICEQUALITYMODEL

Word of mouth communications

Expected service

Past experience

Personal needs

Perceived service

Service delivery (including pre-and post contacts)

Translation of perceptions into service quality specifications

Management perceptions of consumer

External communication s to customers

Employee perceptions of consumer

Consumer

Provider

Source: Parasuraman et al. (1985)
<table>
<thead>
<tr>
<th>S.NO</th>
<th>Dimension</th>
<th>Expectations Cron Bachs Alpha</th>
<th>Perceptions Cron Bachs Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tangibles</td>
<td>.810</td>
<td>.824</td>
</tr>
<tr>
<td>2</td>
<td>Reliability</td>
<td>.745</td>
<td>.791</td>
</tr>
<tr>
<td>3</td>
<td>Responsiveness</td>
<td>.789</td>
<td>.974</td>
</tr>
<tr>
<td>4</td>
<td>Assurance</td>
<td>.800</td>
<td>.732</td>
</tr>
<tr>
<td>5</td>
<td>Empathy</td>
<td>.721</td>
<td>.759</td>
</tr>
<tr>
<td>6</td>
<td>Total Scale</td>
<td>.823</td>
<td>875</td>
</tr>
</tbody>
</table>

Source: Primary data

<table>
<thead>
<tr>
<th>S.NO</th>
<th>Dimension</th>
<th>Expectations Average</th>
<th>Perceptions Average</th>
<th>Gaps</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tangibles</td>
<td>3.95</td>
<td>3.24</td>
<td>-0.74</td>
</tr>
<tr>
<td>2</td>
<td>Reliability</td>
<td>4.08</td>
<td>3.96</td>
<td>-0.12</td>
</tr>
<tr>
<td>3</td>
<td>Assurance</td>
<td>4.23</td>
<td>3.01</td>
<td>-1.22</td>
</tr>
<tr>
<td>4</td>
<td>Responsiveness</td>
<td>4.87</td>
<td>3.62</td>
<td>-1.25</td>
</tr>
<tr>
<td>5</td>
<td>Empathy</td>
<td>4.34</td>
<td>3.78</td>
<td>-0.56</td>
</tr>
</tbody>
</table>

Source: Primary data
Table 3: Hypotheses

<table>
<thead>
<tr>
<th>S.NO</th>
<th>Dimension</th>
<th>Expectations Average</th>
<th>Perceptions Average</th>
<th>Significance value</th>
<th>Null Hypotheses</th>
<th>Alternative Hypotheses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tangibles</td>
<td>3.95</td>
<td>3.24</td>
<td>0.04</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>2</td>
<td>Reliability</td>
<td>4.08</td>
<td>3.96</td>
<td>0.00</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>3</td>
<td>Assurance</td>
<td>4.23</td>
<td>3.01</td>
<td>0.01</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>4</td>
<td>Responsiveness</td>
<td>4.87</td>
<td>3.62</td>
<td>0.00</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>5</td>
<td>Empathy</td>
<td>4.34</td>
<td>3.78</td>
<td>0.02</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

Source: Primary data