

## **A Study on the Service Quality Aspects of Mobile Phone Service Providers in Kerala**

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### **ABSTRACT**

*This study aims to carry out a comparison between the public sector & private sector mobile phone service providers in Kerala. The study also attempt to find out relationship between the various regions of Kerala (North, South, Central) and the overall satisfaction of subscribers. This study makes use of the model SERVPERF. This model appraises the perception of quality services based on the customers' perception of actual performance.*

*Hypothesis testing is carried out with the help of statistical tools to identify and establish the results. The results of hypothesis testing reveal the following*

*(a) There exist significant differences in the perceived service quality from private sector service providers in comparison with public sector service providers.*

*(b) There exist significant differences in the perceived service quality by customers of north, central and south districts of the state of Kerala.*

*The major conclusion of the study states that private sector service providers are far ahead in their race for market share, and they outclass the public sector service providers in every aspect of quality of service. Considering the small state Kerala which is high in population density, the preferences of customers vary across the different regions viz north, central and south. Hence service providers need to zoom in to these region preferences expected by customers so as to satisfy them and retain them in the long run.*

*Recommendations for future research would be the value added services, retention strategies etc adopted by the major service providers in the state of Kerala.*

**Keywords:** Service Quality, SERVPERF, Reliability, Assurance, Tangibility, Empathy, Responsiveness.

### **INTRODUCTION:**

With increasing competition in telecom service, there is a need for higher level of consumer satisfaction, affordable prices and improved quality of service. The hyper competitive nature of the telecom industry has created a need to understand customers, to keep them and to model effective ways to market new services.

Major telecom service providers are striving to understand the customers' telecommunication patterns and hence they are finding it very difficult to retain the customers for longer periods.

In a service sector which is highly dominated by technological advancement and tough competition from different players there is an urgent need for mobile phone service providers to focus their marketing strategies on customer satisfaction and long term retention.

## **OBJECTIVES OF THE STUDY**

1. To carryout a comparison between private sector and public sector service providers based on the SERVPERF dimensions.
2. To study the relationship between the various regions of Kerala (North, South, Central) based on the SERVPERF dimensions.

## **LITERATURE REVIEW:**

### **Quality of Service:**

Service quality refers to an attitude formed by a long-term overall evaluation of a firm's performance. A successful relationship between businesses and a customer is centered on mutually satisfying goals. These goals tend to evolve with time, technology and financial and political environment. (Armstrong & Kotler, 1996) described customer satisfaction as an emotion resulting from the evaluation of the balance between the services described and provided against the felt needs that motivated the purchase decision. (Bitner & Zeithaml, 2003) identified that satisfaction is the customers' evaluation of the fulfillment of their requirements and expectations from a product or service. As said by (Boselie et al. 2002) satisfaction is a positive, affective state resulting from the review of all aspects of an organisation's working relationship with another.

Better Value for Money (could include service after sales, unique features of the product etc.)

Value of economy has constantly been a core reflection in a decision making action by the management. Value for money can be defined as customers' perception of a service in terms of its economy, efficiency and effectiveness in relation to the cost of the service. Thus, value of money for a service delineates that if an organisation achieves maximum benefit from the goods and services it attains compared to the resources available to it. It looks into the cost of goods and services as well as the quality, price, usage of resources, suitability, fitness for purpose, and convenience to judge whether they form good value. (Kotler & Keller, 2006) explained that customer value could be articulated as a ratio of the perception of benefits to the total cost of ownership. Thus for any business to enhance the value of its services it has to improve ways of perceived benefits or reduce the total cost of ownership.

As per (Susan & Derek Nash, 2002), exceeding customer expectations and 'going the extra mile can leave a memorable impression that the customer talks about time and time again.' This approach of delivering customer service helps to gain and retain customers and stay ahead of the competition

### **Customer Loyalty and Customer Retention:**

#### **Word of Mouth Recruits New Customers:**

The business needs a good understanding of the evolving needs in order to sustain and develop business, while at the same time providing a good quality service to its consumers at an acceptable price delivering good value. Such change is also essential to recruit new customers and retain market position in that business. (Zineldin M, 2006) has added that one of the conditions of true customer loyalty is total satisfaction.

(Reichheld F, 2001) discussed the advantages of customer loyalty to the service provider. Loyalty brings continuous profit, reduces marketing cost, increases per-customer revenue growth through greater interaction and service utilization and increases referrals which is a marketing tool that carries the advantage of the trust projected in the service provided, which is difficult to achieve in other forms of advertising strategies. There is a direct link between customer satisfaction, customer loyalty and customer retention. The interest in understanding the dynamics of customer satisfaction comes from its relationship to business promotion and profitability that comes from retention of that customer and customer driven promotion of the business through recommendations and recruitment of new clients.

### **Servqual Model Quantifies the Service Quality:**

Excellence in service is yet another factor that influences customer loyalty. The study conducted by (Boulding et al. 1993); (Cronin & Taylor, 1992) explored the relationship between quality of service and customer loyalty. Service quality is mainly determined by the customers' viewpoint of the service offering they received and their evaluation as to whether it matches or exceeds their expectations.

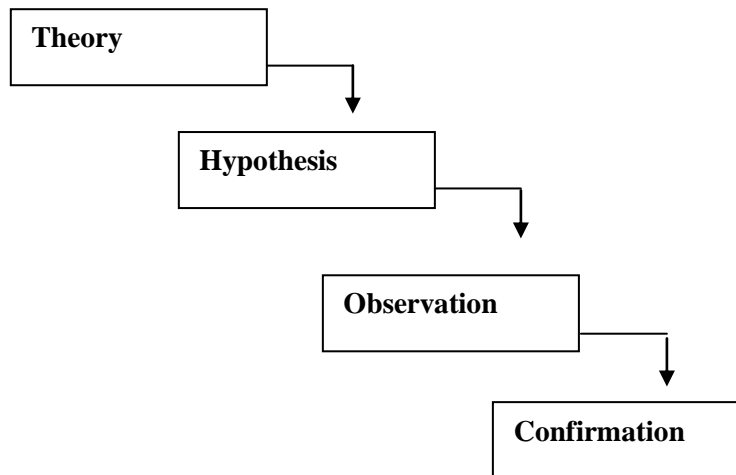
Zeithmal's SERVQUAL method can be used to measure the service quality. This measures the difference customers' expectations about service quality and perceived quality.

## RESEARCH METHODOLOGY:

Descriptive research was adopted for this research work.

**Research Approach** – Deductive Approach.

**Figure 1:**



In this study, existing empirical theory is selected, applied and tested to measure the customer's perceived service quality for mobile services and its impact on customer satisfaction and to provide recommendation in the context of mobile service providers in Kerala circle. Hence the study is deductive in nature

### **Models Used:**

SERVPERF and SERVQUAL models which are applicable for mobile phone service quality measurement along with new dimensions such as systematisation and social dimensions.

### **Questionnaire Development:**

The questionnaire consists of three sections- Section A includes the demographic details of the respondents. Section B includes questions related to service quality dimensions. Section C includes data usage pattern of the respondents.

In Section B of the questionnaire Likert Scale with rating of 1 to 7 was used. A scale value of 7=Strongly Agree, 1=Strongly Disagree and 3=Uncertain. The customer satisfaction among mobile phone users of Kerala is measured in terms of service quality dimensions – Tangibility, Reliability, Responsiveness, Empathy, Assurance and additionally data service usage pattern as an add on dimension.

### **Sampling:**

A random sample of mobile phone users spread across the state of Kerala was used to collect the data. Further, these respondents were of 18 years of age and above, who had been using the services for at least six months and who have visited a mobile store at least once. The data collected would throw light on the customer perception and their actual experience they get regarding the services from the mobile phone service provider

### **Sample size:**

Sample size determined for the study = 835

### **Statistical Tools used:**

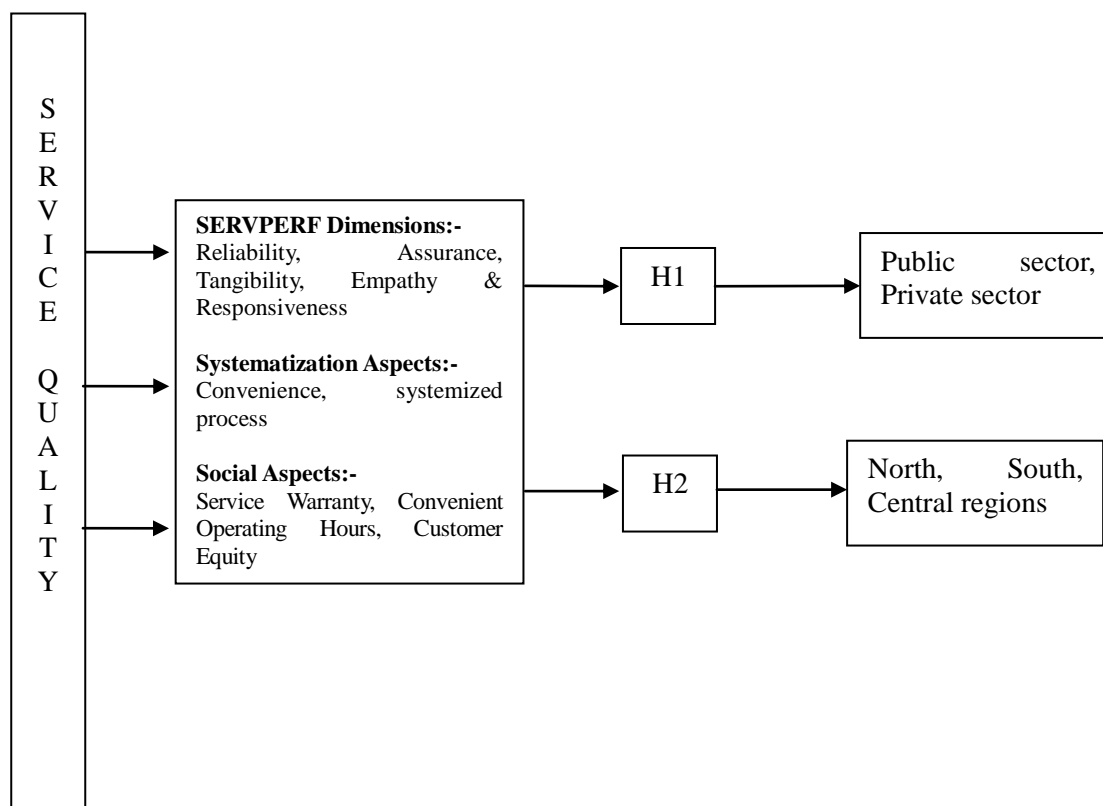
- Z test to carry out a comparison between private sector and public sector service providers based on the SERVPERF dimensions.
- ANOVA to study the relationship between the various regions of Kerala (North, South, Central) and the overall satisfaction of subscribers.

### Hypothesis:

- H1: There is no significant difference between public sector and private sector service providers based on the SERVPERF dimensions
- H2: There is no significant different between the various regions of Kerala based on the SERVPERF dimensions.

### Conceptual Framework of variables:

**Figure 2: The theoretical framework of correlation between the dimension of SERVPERF and the satisfaction of customer's**



### Independent Variables:

These variables are the one which is tested, changed by the researcher. In this study service quality aspects of different mobile phone service provider are tested.

### Dependent Variables:

These are variables which are observed and measured. These are variables which might be affected by the change in independent variable. In this study the overall customer satisfaction of the customers are measured on a likert scale of 7 in which score 1 being the 'lowest' and 7 being the 'highest' level of satisfaction.

Factors identified for measuring service quality aspects of service providers

**Table 1: Factors identified for measuring service quality aspects of service providers**

Dimensions	Items
Tangibility Aspects	<ul style="list-style-type: none"> <li>• Customer service counter was well equipped with modern facilities.</li> <li>• The office furniture, its physical layout etc are comfortable for customer interactions</li> <li>• Customer service staff was well dressed</li> <li>• Visually appealing Promotional brochure was present at the customer service counter</li> </ul>
Reliability Aspects	<ul style="list-style-type: none"> <li>• The services are delivered as promised</li> <li>• The customer service staff has a sympathetic and reassuring approach to your problem</li> <li>• The customer service staff is dependable</li> </ul>

Dimensions	Items
	<ul style="list-style-type: none"> <li>• The customer service staff records all transaction details accurately</li> </ul>
Responsiveness Aspects	<ul style="list-style-type: none"> <li>• The customer service staff told me the exact time when the service will be performed</li> <li>• I receive prompt service from the service provider staff.</li> <li>• Customer service staff is always willing to help the customers</li> <li>• Customer service staff does not appear to be too busy in responding customer requests</li> </ul>
Assurance Aspects	<ul style="list-style-type: none"> <li>• I trust the customer service staff</li> <li>• I feel safe when consulting business related service with customer service staff</li> <li>• The customer service staff is polite</li> <li>• Customer service staff seems to have received adequate supports from the service provider to do their job well</li> </ul>
Empathy Aspects	<ul style="list-style-type: none"> <li>• Customer service staff gives me individual attention</li> <li>• Customer service staff is clear about my requirements</li> <li>• Customer service staff is willing to clarify all my doubts regarding the service</li> <li>• The operating hours of the service provider is convenient for most of the customers</li> </ul>
Systematization Aspects	<ul style="list-style-type: none"> <li>• Having processes for decreasing time of services</li> <li>• Having the processes that do functions without error</li> <li>• Having processes for offering services without more bureaucracy</li> <li>• Promoting technological ability for offering effective services for customers</li> </ul>
Social Aspect	<ul style="list-style-type: none"> <li>• Offering services with warranty</li> <li>• Convenience of geographical situation for easy accessibility by public</li> <li>• Treat all customers equally</li> <li>• Commitment and courtesy of employees</li> </ul>

#### Data Analysis:

A) Comparison between Private and Public sector mobile phone service providers.

To analyse if there is a significant difference in the customer satisfaction provided by Private and Public Service providers; z-test for difference of means is carried out. The study has 582 Private and 253 Public service providers accessed by the customers.

**Table 2: Cross Tabulation of Private Sector & Public Sector service providers**

6. Service Provider? * PublicpvtCrosstabulation				
Count				
		Public Pvt		Total
		Private	Public	
	Airtel	122	0	122
	BSNL	0	253	253
	Docomo	31	0	31
	Idea	170	0	170
	Jio	45	0	45
	Reliance	28	0	28
	Vodafone	186	0	186
<b>Total</b>		<b>582</b>	<b>253</b>	<b>835</b>

The means test requires an initial check of equality of variance of the pairs of variables. This is carried out by Levene's test which has null hypothesis that every pair has variances which are not significantly different. The result of Levene's test suggests that the variance for seven variables ( Modern outlook of customer service division, Comfortable office Furniture, Well dressed staff, Visually appealing brochure, Staff records all transaction details accurately, Advanced technology used for providing services, . Services received were backed with warranty and easily accessible office location) are equal while for the remaining variables the variances differ significantly.

**Table 3: T-Test for Comparison between Private and Public Service providers**

		Publicpvt	N	Mean	Std. Deviation	T statistic	p-value	Remark/ conclusion
Tangibility Aspects	9a. Modern outlook of customer service division	Public	253	4.35	1.488	-1.306	.192	Accept Ho
		Private	582	4.49	1.363			
	9b. Comfortable office Furniture	Public	253	4.35	1.376	-.889	.375	Accept Ho
		Private	582	4.44	1.301			
	9c. Well dressed staff	Public	253	5.25	1.476	4.790	0.000**	Reject H <sub>0</sub>
		Private	582	4.68	1.631			
	9d. Visually appealing brochure	Public	253	4.17	1.089	-5.668	.000**	Reject H <sub>0</sub>
		Private	582	4.63	1.094			
Reliability Aspect	10a. Service delivered as promised	Public	253	4.18	1.684	-5.400	0.000**	Reject H <sub>0</sub>
		Private	582	4.82	1.301			
	10b. Sympathetic approach of staff	Public	253	4.58	1.259	2.148	0.032*	Reject H <sub>0</sub>
		Private	582	4.36	1.581			
	10c. Dependable staff	Public	253	4.02	1.197	-4.939	0.000**	Reject H <sub>0</sub>
		Private	582	4.52	1.640			
	10d. Staff records all transaction details accurately	Public	253	4.44	1.304	-2.590	0.010*	Reject H <sub>0</sub>
		Private	582	4.75	1.663			
Responsive ness Aspect	11a. Staff informed me the exact time of service	Public	253	4.48	1.385	-1.896	0.058	Accept Ho
		Private	582	4.70	1.838			
	11b. Received prompt service	Public	253	4.34	1.289	-1.563	0.118	Reject H <sub>0</sub>
		Private	582	4.51	1.758			
	11c. Helping mentality of the staff	Public	253	4.40	1.255	-2.471	0.014**	Reject H <sub>0</sub>
		Private	582	4.66	1.689			
	11d. Staff does not appear to be too busy	Public	253	4.33	1.228	2.309	0.021**	Reject H <sub>0</sub>
		Private	582	4.10	1.528			
Assurance Aspect	12a. I trust the staff	Public	253	4.34	.997	-.193	0.847	Accept Ho
		Private	582	4.35	1.663			
	12b. I feel safe about my business data while consulting the staff	Public	253	3.98	1.197	-3.785	0.000**	Reject H <sub>0</sub>
		Private	582	4.35	1.474			
	12c. Staff is polite to me	Public	253	4.32	1.399	-2.166	0.031*	Reject H <sub>0</sub>
		Private	582	4.56	1.657			
	12d. Well trained staff	Public	253	4.26	1.284	-2.078	0.038*	Reject H <sub>0</sub>
		Private	582	4.49	1.679			
Empathy Aspect	13a. I receive individual attention from staff	Public	253	4.45	1.156	.921	0.357	Accept Ho
		Private	582	4.36	1.718			
	13b. Staff is clear about my requirement	Public	253	4.44	1.024	-2.100	0.036*	Reject H <sub>0</sub>
		Private	582	4.63	1.591			
	13c. Staff is willing to clear my doubts	Public	253	4.38	1.119	-2.450	0.015*	Reject H <sub>0</sub>
		Private	582	4.61	1.591			
	13d. Operating hours is convenient for customers	Public	253	4.16	1.549	-5.788	0.000**	Reject H <sub>0</sub>
		Private	582	4.87	1.770			
Systematiz ation Aspects	14a. Simple and efficient process exist	Public	253	3.87	1.155	-4.243	0.000**	Reject H <sub>0</sub>
		Private	582	4.29	1.611			
	14b. Error free process	Public	253	3.88	1.519	-6.142	0.000**	Reject H <sub>0</sub>

		Publicpvt	N	Mean	Std. Deviation	T statistic	p-value	Remark/ conclusion
Social Aspect	exist	Private	582	4.61	1.724	-4.632	0.000**	Reject H <sub>0</sub>
	14c. Received service without bureaucracy	Public	253	3.94	1.465			
		Private	582	4.47	1.702	-2.431	0.015*	Reject H <sub>0</sub>
	14d. Advanced technology used for providing services	Public	253	4.51	1.495			
		Private	582	4.79	1.592	-3.417	0.001**	Reject H <sub>0</sub>
	15a. Services received were backed with warranty	Public	253	3.70	1.207			
Social Aspect		Private	582	4.05	1.404	-5.752	0.000**	Reject H <sub>0</sub>
	15b. Easily accessible office location	Public	253	4.12	1.362			
		Private	582	4.76	1.521	-3.738	0.000**	Reject H <sub>0</sub>
	15c. All customers were treated equally	Public	253	4.25	1.346			
		Private	582	4.65	1.590	-1.148	0.251	Accept Ho
	15d. Courteous and committed service staff	Public	253	4.32	1.344			
Social Aspect		Private	582	4.45	1.691			

\* & \*\* indicates significance at 5 and 1% respectively.

### Null Hypothesis:

There is no significant difference in the customer satisfaction provided by Private and Public Service providers

### To identify relationship between the various regions of Kerala (North, South, Central) based on the SERVPERF dimensions:

Analysis of Variance (ANOVA) test is carried out to find if there is a significant difference in customer satisfaction between the three parts in Kerala- North, central and South. There are 285 customers from Central, 216 from North and 334 from South Kerala.

Cross Tabulation of Customers region wise - Refer Table 4

ANOVA test has the null hypothesis that there is no significant difference in customer satisfaction between the three parts in Kerala- North, Central and South.

ANOVA test - Refer Table 5

The result of ANOVA proves that there is significant difference between the three regions with regard to Customer satisfaction. Hence Post-Hoc analysis due to Bonferonni is carried out which will analyze pair wise which are the means that differ significantly. Here, pair wise difference of means is tested for its significance.

Null hypothesis: There is no significant difference in means between any of the pairs of variables

Post-Hoc Analysis for Multiple Comparisons using Bonferroni test

Refer Table 6

### FINDINGS AND DISCUSSION:

#### Comparison between Private and Public sector mobile phone service providers:

**Tangibility Aspects:** The results provided in the table indicates that 'Modern outlook of customer service division' and 'Comfortable office Furniture' are two variables that do not have significant difference between Private and Public service providers. Meanwhile the variables 'Well dressed staff' and 'Visually appealing brochure' has significant difference between Private and Public service providers.

**Reliability Aspect:** As per the above results the variables – 'Service delivered as promised', 'Sympathetic approach of staff', 'Dependable staff', 'Staff records all transaction details accurately' have significant difference between Private and Public service providers.

**Responsiveness Aspect:** According to the results provided in the above table, 'Staff informed me the exact time of service' is the only variable that do not have significant difference between Private and Public service providers. Meanwhile 'Received prompt service', 'Helping mentality of the staff', 'Staff does not appear to be too busy' are the variables which have significant difference between Private and Public service providers.

**Assurance Aspect:** As per the above results the variables – 'I trust the staff' is the only variable that do not have significant difference between Private and Public service providers. Meanwhile ' I feel safe about my

business data while consulting the staff', 'Staff is polite to me', 'Well trained staff' busy' are the variables which have significant difference between Private and Public service providers.

**Empathy Aspect:** The above results indicate that 'I receive individual attention from staff' is the only variable that does not have significant difference between Private and Public service providers. Meanwhile 'Staff is clear about my requirement',

'Staff is willing to clear my doubts' and 'Operating hours is convenient for customers' are the variables which have significant difference between Private and Public service providers.

**Systematization Aspects:** As per the above results the variables – 'Simple and efficient process', 'Error free process', 'service without bureaucracy', 'Advanced technology used' are the variables which have significant difference between Private and Public service providers.

**Social Aspect:** As per the above results the variables- 'Services received were backed with warranty', 'Easily accessible office location', 'All customers were treated equally' have significant difference between Private and Public service providers.

But for variable 'Courteous and committed service staff' there is no significant difference between Private and Public service providers.

### **To identify relationship between the various regions of Kerala (North, South, Central) based on the SERVPERF dimensions:**

The results of ANOVA test failed the null hypothesis. It reveals that the customers' preferences and tastes vary across the different regions of Kerala. Kerala has a reputation of being, communally, one of the most religiously diverse and cosmopolitan states in India.

### **CONCLUSION:**

The results of the research work indicate that private sector service providers are embracing the technological advancement in telecommunications much faster to stay ahead in their race for market share, and they outclass the public sector service providers in every aspect of quality of service. Kerala is a unique state which is high in literacy rate and population density. The preferences of customers are also unique which vary across the different regions viz north, central and south. Hence service providers need to zoom in to these region preferences expected by customers so as to satisfy them and retain them in the long run.

### **ACKNOWLEDGEMENTS:**

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### **REFERENCES:**

- Armstrong, Gary & Kotler(1996). *Principles of marketing. Englewood Cliffs, N.J.* ; Singapore : Prentice Hall, c1996
- Boulding, W., Kalra, A., Staelin, R., Zeithaml, V.A., (1993). A dynamic process model of service quality: from expectations to behavioral intentions. *Journal of Marketing Research*, Vol. 30, February, pp. 7-27.
- J. Joseph Cronin, Jr. and Steven A. Taylor (1992). Measuring Service Quality: A Reexamination and Extension. *Journal of Marketing*, Vol. 56, No. 3 (Jul., 1992), pp. 55-68
- Kotler, P. and Keller, K. (2006). *Marketing Management*. 12th Edition, Prentice Hall, Upper Saddle River.
- Nunnally, C.J. (1978). *Psychometric Theory*. McGraw-Hill, New York, NY
- Reichheld, Frederick F (2001). *The loyalty effect: Boston, Mass: Harvard Business School Press*
- Susan Nash, Derek Nash (2002). *Deliver Outstanding Customer Service*, 2<sup>nd</sup> edition, Little, Brown Book Group London, United Kingdom
- Ton van der Wiele, Paul Boselie, Martijn Hesselink, (2002). Empirical evidence for the relationship between customer satisfaction and business performance, Managing Service Quality. *An International Journal*, Vol. 12 Issue: 3, pp.184-193 Published by MCB UP Ltd
- Zeithaml, V.A. and Bitner, M.J. (2003). *Services Marketing: Integrating Customer Focus across the Firm*. 3<sup>rd</sup> edition, Irwin McGraw-Hill, New York.
- Zineldin, M. (2006). The quality of health care and patient satisfaction: an exploratory investigation of the 5Q model at some Egyptian and Jordanian medical clinics, *International Journal of Health Care Quality Assurance*, Vol. 19 No. 1, pp. 60-92.

**TABLES:**

**Table 4: ANNOVA test to identify relationship between North, Central and South regions of Kerala in terms of customer satisfaction.**

6. Service Provider * Location						
Count						
		Location				Total
			Central	North Ke	South Ke	
	Airtel	0	58	24	40	122
	BSNL	0	60	71	122	253
	Docomo	0	18	8	5	31
	Idea	0	63	46	61	170
	Jio	0	10	6	29	45
	Reliance	0	6	0	22	28
	Vodafone	0	70	61	55	186
<b>Total</b>		<b>4</b>	<b>285</b>	<b>216</b>	<b>334</b>	<b>839</b>

**Table 5: ANNOVA Test**

<b>Tangebility</b>	<b>F</b>	<b>Sig.</b>	<b>Remark</b>
9a. Modern outlook of customer service division	18.759	.000	Reject H <sub>0</sub>
9b. Comfortable office Furniture	6.661	.001	Reject H <sub>0</sub>
9c. Well dressed staff	15.223	.000	Reject H <sub>0</sub>
9d. Visually appealing brochure	21.588	.000	Reject H <sub>0</sub>
<b>Reliability Aspect</b>			
10a. Service delivered as promised	13.999	.000	Reject H <sub>0</sub>
10b. Sympathetic approach of staff	15.436	.000	Reject H <sub>0</sub>
10c. Dependable staff	8.865	.000	Reject H <sub>0</sub>
10d. Staff records all transaction details accurately	17.070	.000	Reject H <sub>0</sub>
11a. Staff informed me the exact time of service	11.134	.000	Reject H <sub>0</sub>
11b. Received prompt service	15.032	.000	Reject H <sub>0</sub>
11c. Helping mentality of the staff	4.030	.018	Reject H <sub>0</sub>
11d. Staff does not appear to be too busy	13.535	.000	Reject H <sub>0</sub>
12a. I trust the staff	3.611	.027	Reject H <sub>0</sub>
12b. I feel safe about my business data while consulting the staff	13.484	.000	Reject H <sub>0</sub>
12c. Staff is polite to me	24.074	.000	Reject H <sub>0</sub>
12d. Well trained staff	22.493	.000	Reject H <sub>0</sub>
13a. I receive individual attention from staff	20.871	.000	Reject H <sub>0</sub>
13b. Staff is clear about my requirement	32.577	.000	Reject H <sub>0</sub>
13c. Staff is willing to clear my doubts	31.332	.000	Reject H <sub>0</sub>
13d. Operating hours is convenient for customers	33.335	.000	Reject H <sub>0</sub>
14a. Simple and efficient process exist	24.487	.000	Reject H <sub>0</sub>
14b. Error free process exist	24.742	.000	Reject H <sub>0</sub>
14c. Received service without bureaucracy	20.398	.000	Reject H <sub>0</sub>
14d. Advanced technology used for providing services	22.999	.000	Reject H <sub>0</sub>
15a. Services received were backed with warranty	14.895	.000	Reject H <sub>0</sub>
15b. Easily accessible office location	45.863	.000	Reject H <sub>0</sub>
15c. All customers were treated equally	26.756	.000	Reject H <sub>0</sub>
15d. Courteous and committed service staff	27.717	.000	Reject H <sub>0</sub>

**Table 6: Post-Hoc Analysis**

Dependent Variable	(I) LocNumber	(J) LocNumber	Mean Difference (I-J)	Std. Error	Sig.	
9a. Modern outlook of customer service division	North Kerala	Central Kerala	-.756 <sup>*</sup>	.124	<b>.000</b>	Reject Ho
		South Kerala	-.487 <sup>*</sup>	.120	<b>.000</b>	Reject Ho
	Central Kerala	North Kerala	.756 <sup>*</sup>	.124	<b>.000</b>	Reject Ho
		South Kerala	.269 <sup>*</sup>	.111	.046	
	South Kerala	North Kerala	.487 <sup>*</sup>	.120	<b>.000</b>	Reject Ho
		Central Kerala	-.269 <sup>*</sup>	.111	.046	
9b. Comfortable office Furniture	North Kerala	Central Kerala	-.329 <sup>*</sup>	.119	<b>.017</b>	Reject Ho
		South Kerala	-.408 <sup>*</sup>	.115	<b>.001</b>	Reject Ho
	Central Kerala	North Kerala	.329 <sup>*</sup>	.119	<b>.017</b>	Reject Ho
		South Kerala	-.079	.106	1.00	
	South Kerala	North Kerala	.408 <sup>*</sup>	.115	<b>.001</b>	Reject Ho
		Central Kerala	.079	.106	1.00	
9c. Well dressed staff	North Kerala	Central Kerala	-.769 <sup>*</sup>	.143	<b>.000</b>	Reject Ho
		South Kerala	-.567 <sup>*</sup>	.138	<b>.000</b>	Reject Ho
	Central Kerala	North Kerala	.769 <sup>*</sup>	.143	<b>.000</b>	Reject Ho
		South Kerala	.202	.127	.341	
	South Kerala	North Kerala	.567 <sup>*</sup>	.138	<b>.000</b>	Reject Ho
		Central Kerala	-.202	.127	.341	
9d. Visually appealing brochure	North Kerala	Central Kerala	-.583 <sup>*</sup>	.098	<b>.000</b>	Reject Ho
		South Kerala	-.117	.095	.654	
	Central Kerala	North Kerala	.583 <sup>*</sup>	.098	<b>.000</b>	Reject Ho
		South Kerala	.466 <sup>*</sup>	.088	<b>.000</b>	Reject Ho
	South Kerala	North Kerala	.117	.095	.654	
		Central Kerala	-.466 <sup>*</sup>	.088	<b>.000</b>	Reject Ho
10a. Service delivered as promised	North Kerala	Central Kerala	-.684 <sup>*</sup>	.129	<b>.000</b>	Reject Ho
		South Kerala	-.365 <sup>*</sup>	.125	<b>.011</b>	Reject Ho
	Central Kerala	North Kerala	.684 <sup>*</sup>	.129	<b>.000</b>	Reject Ho
		South Kerala	.319 <sup>*</sup>	.116	<b>.018</b>	Reject Ho
	South Kerala	North Kerala	.365 <sup>*</sup>	.125	<b>.011</b>	Reject Ho
		Central Kerala	-.319 <sup>*</sup>	.116	<b>.018</b>	Reject Ho
10b. Sympathetic approach of staff	North Kerala	Central Kerala	-.720 <sup>*</sup>	.132	<b>.000</b>	Reject Ho
		South Kerala	-.290	.128	.072	
	Central Kerala	North Kerala	.720 <sup>*</sup>	.132	<b>.000</b>	Reject Ho
		South Kerala	.430 <sup>*</sup>	.118	<b>.001</b>	Reject Ho
	South Kerala	North Kerala	.290	.128	.072	
		Central Kerala	-.430 <sup>*</sup>	.118	<b>.001</b>	Reject Ho
10c. Dependable staff	North Kerala	Central Kerala	-.559 <sup>*</sup>	.137	<b>.000</b>	Reject Ho
		South Kerala	-.202	.133	.386	
	Central Kerala	North Kerala	.559 <sup>*</sup>	.137	<b>.000</b>	Reject Ho
		South Kerala	.357 <sup>*</sup>	.123	<b>.011</b>	Reject Ho
	South Kerala	North Kerala	.202	.133	.386	
		Central Kerala	-.357 <sup>*</sup>	.123	<b>.011</b>	Reject Ho
10d. Staff records all transaction details accurately	North Kerala	Central Kerala	-.754 <sup>*</sup>	.139	<b>.000</b>	Reject Ho
		South Kerala	-.196	.134	.438	
	Central Kerala	North Kerala	.754 <sup>*</sup>	.139	<b>.000</b>	Reject Ho
		South Kerala	.559 <sup>*</sup>	.124	<b>.000</b>	Reject Ho
	South Kerala	North Kerala	.196	.134	.438	
		Central Kerala	-.559 <sup>*</sup>	.124	<b>.000</b>	Reject Ho
11a. Staff informed me the exact time of service	North Kerala	Central Kerala	-.712 <sup>*</sup>	.153	<b>.000</b>	Reject Ho
		South Kerala	-.311	.148	.108	

Dependent Variable	(I) LocNumber	(J) LocNumber	Mean Difference (I-J)	Std. Error	Sig.	
	Central Kerala	North Kerala	.712 <sup>*</sup>	.153	<b>.000</b>	Reject Ho
		South Kerala	.401 <sup>*</sup>	.137	<b>.010</b>	Reject Ho
	South Kerala	North Kerala	.311	.148	.108	
		Central Kerala	-.401 <sup>*</sup>	.137	<b>.010</b>	Reject Ho
11b. Received prompt service	North Kerala	Central Kerala	-.784 <sup>*</sup>	.145	<b>.000</b>	Reject Ho
		South Kerala	-.350 <sup>*</sup>	.140	<b>.038</b>	Reject Ho
	Central Kerala	North Kerala	.784 <sup>*</sup>	.145	<b>.000</b>	Reject Ho
		South Kerala	.434 <sup>*</sup>	.129	<b>.003</b>	Reject Ho
	South Kerala	North Kerala	.350 <sup>*</sup>	.140	<b>.038</b>	Reject Ho
		Central Kerala	-.434 <sup>*</sup>	.129	<b>.003</b>	Reject Ho
11c. Helping mentality of the staff	North Kerala	Central Kerala	-.390 <sup>*</sup>	.141	<b>.018</b>	Reject Ho
		South Kerala	-.147	.137	.849	
	Central Kerala	North Kerala	.390 <sup>*</sup>	.141	<b>.018</b>	Reject Ho
		South Kerala	.243	.126	.165	
	South Kerala	North Kerala	.147	.137	.849	
		Central Kerala	-.243	.126	.165	
11d. Staff does not appear to be too busy	North Kerala	Central Kerala	-.668 <sup>*</sup>	.129	<b>.000</b>	Reject Ho
		South Kerala	-.414 <sup>*</sup>	.124	<b>.003</b>	Reject Ho
	Central Kerala	North Kerala	.668 <sup>*</sup>	.129	<b>.000</b>	Reject Ho
		South Kerala	.254	.115	.082	
	South Kerala	North Kerala	.414 <sup>*</sup>	.124	<b>.003</b>	Reject Ho
		Central Kerala	-.254	.115	.082	
12a. I trust the staff	North Kerala	Central Kerala	-.358 <sup>*</sup>	.134	<b>.023</b>	Reject Ho
		South Kerala	-.172	.130	.558	
	Central Kerala	North Kerala	.358 <sup>*</sup>	.134	<b>.023</b>	Reject Ho
		South Kerala	.186	.120	.362	
	South Kerala	North Kerala	.172	.130	.558	
		Central Kerala	-.186	.120	.362	
12b. I feel safe about my business data while consulting the staff	North Kerala	Central Kerala	-.575 <sup>*</sup>	.125	<b>.000</b>	Reject Ho
		South Kerala	-.562 <sup>*</sup>	.121	<b>.000</b>	Reject Ho
	Central Kerala	North Kerala	.575 <sup>*</sup>	.125	<b>.000</b>	Reject Ho
		South Kerala	.012	.112	1.00	
	South Kerala	North Kerala	.562 <sup>*</sup>	.121	<b>.000</b>	Reject Ho
		Central Kerala	-.012	.112	1.00	
12c. Staff is polite to me	North Kerala	Central Kerala	-.950 <sup>*</sup>	.139	<b>.000</b>	Reject Ho
		South Kerala	-.400 <sup>*</sup>	.135	<b>.009</b>	Reject Ho
	Central Kerala	North Kerala	.950 <sup>*</sup>	.139	<b>.000</b>	Reject Ho
		South Kerala	.550 <sup>*</sup>	.125	<b>.000</b>	Reject Ho
	South Kerala	North Kerala	.400 <sup>*</sup>	.135	<b>.009</b>	Reject Ho
		Central Kerala	-.550 <sup>*</sup>	.125	<b>.000</b>	Reject Ho
12d. Well trained staff	North Kerala	Central Kerala	-.851 <sup>*</sup>	.138	<b>.000</b>	Reject Ho
		South Kerala	-.195	.134	.439	
	Central Kerala	North Kerala	.851 <sup>*</sup>	.138	<b>.000</b>	Reject Ho
		South Kerala	.656 <sup>*</sup>	.124	<b>.000</b>	Reject Ho
	South Kerala	North Kerala	.195	.134	.439	
		Central Kerala	-.656 <sup>*</sup>	.124	<b>.000</b>	Reject Ho
13a. I receive individual attention from staff	North Kerala	Central Kerala	-.870 <sup>*</sup>	.138	<b>.000</b>	Reject Ho
		South Kerala	-.335 <sup>*</sup>	.134	<b>.037</b>	Reject Ho
	Central Kerala	North Kerala	.870 <sup>*</sup>	.138	<b>.000</b>	Reject Ho
		South Kerala	.535 <sup>*</sup>	.124	<b>.000</b>	Reject Ho
	South Kerala	North Kerala	.335 <sup>*</sup>	.134	<b>.037</b>	Reject Ho
		Central Kerala				

Dependent Variable	(I) LocNumber	(J) LocNumber	Mean Difference (I-J)	Std. Error	Sig.	
		Central Kerala	-.535*	.124	.000	Reject Ho
13b. Staff is clear about my requirement	North Kerala	Central Kerala	-.698*	.126	.000	Reject Ho
		South Kerala	.180	.122	.419	
	Central Kerala	North Kerala	.698*	.126	.000	Reject Ho
		South Kerala	.878*	.112	.000	Reject Ho
	South Kerala	North Kerala	-.180	.122	.419	
		Central Kerala	-.878*	.112	.000	Reject Ho
13c. Staff is willing to clear my doubts	North Kerala	Central Kerala	-.938*	.128	.000	Reject Ho
		South Kerala	-.237	.124	.166	
	Central Kerala	North Kerala	.938*	.128	.000	Reject Ho
		South Kerala	.701*	.114	.000	Reject Ho
	South Kerala	North Kerala	.237	.124	.166	
		Central Kerala	-.701*	.114	.000	Reject Ho
13d. Operating hours is convenient for customers	North Kerala	Central Kerala	-1.078*	.151	.000	Reject Ho
		South Kerala	-.147	.146	.939	
	Central Kerala	North Kerala	1.078*	.151	.000	Reject Ho
		South Kerala	.931*	.135	.000	Reject Ho
	South Kerala	North Kerala	.147	.146	.939	
		Central Kerala	-.931*	.135	.000	Reject Ho
14a. Simple and efficient process exist	North Kerala	Central Kerala	-.877*	.132	.000	Reject Ho
		South Kerala	-.278	.127	.088	
	Central Kerala	North Kerala	.877*	.132	.000	Reject Ho
		South Kerala	.599*	.118	.000	Reject Ho
	South Kerala	North Kerala	.278	.127	.088	
		Central Kerala	-.599*	.118	.000	Reject Ho
14b. Error free process exist	North Kerala	Central Kerala	-.946*	.149	.000	Reject Ho
		South Kerala	-.186	.144	.592	
	Central Kerala	North Kerala	.946*	.149	.000	Reject Ho
		South Kerala	.760*	.133	.000	Reject Ho
	South Kerala	North Kerala	.186	.144	.592	
		Central Kerala	-.760*	.133	.000	Reject Ho
14c. Received service without bureaucracy	North Kerala	Central Kerala	-.879*	.146	.000	Reject Ho
		South Kerala	-.260	.141	.196	
	Central Kerala	North Kerala	.879*	.146	.000	Reject Ho
		South Kerala	.618*	.130	.000	Reject Ho
	South Kerala	North Kerala	.260	.141	.196	
		Central Kerala	-.618*	.130	.000	Reject Ho
14d. Advanced technology used for providing services	North Kerala	Central Kerala	-.934*	.138	.000	Reject Ho
		South Kerala	-.503*	.133	.001	Reject Ho
	Central Kerala	North Kerala	.934*	.138	.000	Reject Ho
		South Kerala	.431*	.123	.001	Reject Ho
	South Kerala	North Kerala	.503*	.133	.001	Reject Ho
		Central Kerala	-.431*	.123	.001	Reject Ho
15a. Services received were backed with warranty	North Kerala	Central Kerala	-.655*	.120	.000	Reject Ho
		South Kerala	-.336*	.116	.012	Reject Ho
	Central Kerala	North Kerala	.655*	.120	.000	Reject Ho
		South Kerala	.319*	.108	.009	Reject Ho
	South Kerala	North Kerala	.336*	.116	.012	Reject Ho
		Central Kerala	-.319*	.108	.009	Reject Ho
15b. Easily accessible office location	North Kerala	Central Kerala	-.970*	.129	.000	Reject Ho
		South Kerala	.045	.125	1.00	

Dependent Variable	(I) LocNumber	(J) LocNumber	Mean Difference (I-J)	Std. Error	Sig.	
	Central Kerala	North Kerala	.970 <sup>*</sup>	.129	<b>.000</b>	Reject Ho
		South Kerala	1.015 <sup>*</sup>	.115	<b>.000</b>	Reject Ho
	South Kerala	North Kerala	-.045	.125	1.00	
		Central Kerala	-1.015 <sup>*</sup>	.115	<b>.000</b>	Reject Ho
15c. All customers were treated equally	North Kerala	Central Kerala	-.933 <sup>*</sup>	.134	<b>.000</b>	Reject Ho
		South Kerala	-.295	.130	.069	
	Central Kerala	North Kerala	.933 <sup>*</sup>	.134	<b>.000</b>	Reject Ho
		South Kerala	.638 <sup>*</sup>	.120	<b>.000</b>	Reject Ho
	South Kerala	North Kerala	.295	.130	.069	
		Central Kerala	-.638 <sup>*</sup>	.120	<b>.000</b>	Reject Ho
15d. Courteous and committed service staff	North Kerala	Central Kerala	-.906 <sup>*</sup>	.139	<b>.000</b>	Reject Ho
		South Kerala	-.118	.135	1.00	
	Central Kerala	North Kerala	.906 <sup>*</sup>	.139	<b>.000</b>	Reject Ho
		South Kerala	.788 <sup>*</sup>	.125	<b>.000</b>	Reject Ho
	South Kerala	North Kerala	.118	.135	1.00	
		Central Kerala	-.788 <sup>*</sup>	.125	<b>.000</b>	Reject Ho

The result of Post-Hoc Analysis proves that there is significant difference between the three regions with regard to Customer satisfaction.

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