

## Differentiated Service is the Success Measure: An investigation in Telecom Industry Odisha, India

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### Abstract

*Purpose: The paper aims to investigate the relative importance of the factors among existing customers of mobile telecom industry and identify any difference in importance among the service quality dimension with respect to demographic variables. Research Design: Questionnaire response to different quality dimensions was used to identify customer preference. The data was segregated as per demographic variables and the differences were identified and interpreted. The hypotheses are tested on data from a survey of 803 users of mobile services, in Odisha, India. Findings: The study results suggest that there exist difference in preference order for different dimensions when grouped by demographic factors. Research limitations: Non parametric research design and generalization from the findings should be context specific. Factors considered for the study may not be exhaustive for different situation. Practical implications: The demographic differences observed with respect to demographic factors indicate that the efforts to signal service quality must be prioritized as per the preference of specific demographic variable. Business can channelize the business processes and integrated communication effort to customers as per quality dimension preference. Similarly entrepreneurs in service industry should understand the differences in priorities of service quality factors to be able to utilize their scarce resources in customer communication. The differentiation indicated could be industry specific. Originality/value: The paper is original for its factors selection and segregation of preference among different demographic variable in mobile services industry in Odisha, India.*

**Keywords:** Mobile, Gender, Service Quality, Servqual

### 1. Introduction

Service Sector occupies a significant part of gross domestic product of most of the economies. Similarly, more number of entrepreneurs venture into services sector. Thus the importance of understanding the nuances of services has become crucial. Increase in competition, innovation, price differentiation, co-production, perishability makes the customer satisfaction a complex phenomena in case of services. This paper takes the case of services in telecom industry and analyses different aspects of service quality and customer satisfaction.

### 2. Characteristics of Service

Primarily, services are intangible (Judd, 1964; Mills & Margulies 1980), it is produced and consumed simultaneously (Regan, 1963; Shostack, 1977), considered to be perishable (Regan, 1963), and it is a process rather than a thing (Gronroos, 1983; Shostack, 1977). The concept of service has two components namely "the extent of satisfaction of customer need" and "the value addition that the customer receives" (Dale 2003; Hsieh, Chou & Chen 2002, Deming, 1986). A key difference between goods and services is that the customers generally derive value from services without having ownership of any tangible components (Lovelock, 2001). The fundamental separation between product and

service is that the customer derives utility without ownership.

## 2.1 Service Quality

Service quality and related concepts have been studied and discussed over the past two decades. It is important for the management to understand the constituents of service quality for the organization, to measure it adequately and then take actions for its improvement to deliver increasing value to the customer (Asubonteng et al, 1996). The service quality concept got more emphasis during the early 1980s. Gronroos (1982; 1984), Lehtinen and Lehtinen (1982), Lovelock (1983) and others attempted to bring service quality into prominence.

The measurement and evaluation of service quality is primarily based on quality perception of customers and service providers (Zeitham, Parasuraman, & Berry, 1985). Researchers' are interested in service quality is due to its contribution to cost reduction and increase of customer loyalty and profitability (Cronin & Taylor, 1992; Gammie, 1992; Guru, 2003; Hollowell, 1996; Newman, 2001). It is the customer's feelings about the quality which determines customer satisfaction (Bertrand, 1989; Boothe1990).

Few issues of service quality that have received attention from researchers are; Definition, measurement, relationship with anticipation and perception of service after receiving it (Reynoso, and Moores, 1995).

## 2.2 Measuring Service Quality

The development of the SERVQUAL (Parasuraman et al., 1985, 1988) as a model was indicated as the gap between expected and existing performance, however this model underwent refinements to become an important milestone for the establishment of instrument for evaluation of the gap. The model shared its own share of criticism as well. One of the key criticisms has been the dimensional inconsistency across different service environments, the other criticism has been the difference of scores. The perceived value in case of service quality is quite subjective and distinct, hence varies from customer to customer. Zeithaml (1988), defined perceived value as the overall assessment of the utility of goods or services, which again includes what was the price paid and value received. The same service may be evaluated by the same customer differently in different occasions. So the temporal and spatial stability of service quality evaluation has to indicate consistency. The factors associated service quality could be impacted by recency and context. Service as a need satisfaction mechanism could indicate that more recent the need is, more important the factor becomes. Satisfaction or dissatisfaction depends on the context so will impact the evaluation, which may indicate a transiency. The perceived value by the customer is indicated as the ration between perceived benefit and sacrifice (Monroe. 1991).

Three main conceptualizations of service quality have emerged over the past two decades. Foremost, the SERVQUAL (Parasuraman et al., 1988) model and several variations, address primarily the process related aspects of service quality. A second major theme in the literature is referred to as the Nordic model (Gronroos, 1984) which further incorporates a technical, or outcome related aspect of service quality. Rust and Oliver (1994) add service environment to this conceptualization. Others, Dabholkar et al. (1996) have considered service quality from a multilevel structural approach.

The Service Quality model proposed by Parasuraman et al (Parasuraman, Zeithaml, and Berry, 1988, 1990) divided service quality into five dimensions like "tangibility", "reliability", "responsiveness", "assurance", and "empathy". Tangibility indicates the appearance related to the service setting, like the appearance of physical facilities. Reliability indicates the dependable, accurate and consistent ability to perform the service as was promised. Responsiveness involves demonstrable willingness to help customers in case of need. Assurance is the indication for knowledge, courtesy and ability of the employees involved in service delivery process to convey trust. Empathy involves ability of the employees to care for, listen to, and give individualised attention to customers. Empathy is indicated by access, communication, and understanding of the customer.

Literature pertaining to many studies established that ServQual instrument measures the functional aspects related to processes of service delivery, though the service context or settings are different. Few of the research indicated that the dimensions are not replicable as per the five dimensions established by Parasuraman et al. (1988).

A few researchers (Brady & Cronin, 2001; Kang & James, 2004; Lapierre, 1996; Powpaka, 1996; Richard & Allway, 1993) indicate that SERVQUAL does not take into account the technical (e.g the *outcome*, or *result*) attributes of service quality or measure it. It is also asserted that (Bebko (2000), research on services should emphasize to distinguish between process and outcome of service delivery as well. In the industrial telecommunication services, it may be indicated that technical quality or outcome quality play important role to determine service quality.

At the same time, many other researches (Dabholkar, Thorpe and Rentz, 1996), argue that a single measure of

service quality for different industries is not feasible, hence future research should come up with industry-specific measures of service quality. To another extreme, it is (Schneider and White, 2004) suggested that each organization should determine to what extent each of the dimensions measures its own specific service delivery process, and what should be different dimensions for the service quality (Schneider & Bowen, 1995).

Service Quality and Customer Satisfaction:

Service quality is positively related with "customer satisfaction" (Danaher and Mattsson, 1994; Kim et al., 2004) and "customer preference" (Ranaweera and Neely, 2003). Similar positive relation of service quality with "profitability" (Fornell, 1992; Danaher and Rust, 1996), and "competitiveness" (Rapert and Wren, 1998), is also well documented in academic literature. Customer satisfaction was indicated to be a function of better service quality (Cronin and Taylor, 1992). It has also been indicated that retention of customer is related (Brown & Gulycz, 2001) to customer satisfaction.

In the case of a Nigeria Telecom Industry research, it has been found that customer service has positive impact on customer satisfaction and perception of service quality (Ojo Olu, 2010), the same survey asserts a significant positive relation between satisfaction and service quality. In the case of an empirical study for Malaysian Telecommunications Industry, it is indicated that there exists a strong relationship among customer satisfaction, price and quality (Ismail: Hishamudi et al. 2004).

Thus it can be inferred that the service quality determines the value of any service and is the most important determinant, followed by the extent of satisfaction or dissatisfaction perceived by customers. A study in Pakistan telecommunication sector has indicated that service quality creates brand loyalty which in turn helps retaining customers. It also has been indicated that customer retention is critical to fluid context of telecommunication industry (Nawaz Noor – UL – Ain et al. 2011).

In a study of Service quality of telecom industry in Ghana, "competent staff" has been indicated to be a critical factor for customers (Agyapong Gloria K.Q. 2011). The study indicates that "Tangibility", "Reliability", "Responsiveness" and "Courtesy" to be important factors impacting the perception of service quality. "Corporate image" also has been identified to have important influence on customer perception of service quality, in case of telecom service industry (Rohman Mohammed Sabir 2012).

Bolton and Drew (1991a) went a step further to explore the way customers integrate their perceptions and form an overall perspective about service quality. The findings suggest that customer's previous expectation, perceptions of current performance, along with disconfirmation experiences impacts customer's assessment of service quality. A parallel study by O'Neill and Palmer (2003) also indicated that past experience, or absence of it, relative to a particular service influence customers' perceptions of service quality.

Quality of service is the value derived by the customer. So the quality and customer satisfaction are related to each other. Customer compares the cost that is paid with the satisfaction that is derived indicated by the quality of service. Research suggests that each factor of service quality is related to the customer's satisfaction and the value of service that is derived out of it (Chau & Kao, 2009). There has been difference as to what constitute the dimensions of quality, in one of the research (Cavana et al., 2007) indicated "convenience" as a dimension along with "Assurance", "Responsiveness", "Empathy", "Reliability" and "Convenience".

The other issue of relative importance of each quality dimension has also been a subject of research interest. Some research point that customer recommend the services to others, only when existing experience has been satisfying, thus the empathy and affective attitude of the service provider is more important (Baumann et al, 2006). The same study (Baumann et al, 2006) also found that customer satisfaction has short duration relation with responsiveness, where as empathy has long lasting impact, this in turn influences the repurchase intention. In one of the researches customer satisfaction was reported to have no relation with "convenience" and "reliability" where as assurance, responsiveness and empathy had significant relationship (Cavana et al., 2007). In a contrasting finding, (Ahmed et al., 2010) it was reported that reliability, tangibility, responsiveness and assurance has positive relation with the customer satisfaction where as empathy is not related. Yet in another study (Lai, 2004) conducted in China researcher reported positive relationship of customer satisfaction with empathy, tangibility and assurance.

### 3. Service Quality Dimensions and Demography

Service quality "is by nature a subjective concept, which means that understanding how the customer thinks about service quality is essential to effective management (Rust and Oliver, 1994)".

### 3.1 ServQual Dimensions

The meaning of ServQual dimensions have been indicated, as available in the extant literature. Tangibility indicates the appealing nature of physical environment, Assurance has been taken as the assurance of security, efficiency and variety of services, Responsiveness is explained as attending to customer's needs and complaints promptly any time, Empathy is explained as showing of respect, care and understanding to customers' needs, Reliability is indicated to be competence to give timely, reliable services and truthful to promises, Economy is identified with giving customer value for money, Image is the good reputation of company and brand name. Technical Quality for the case of telecom service provider has been explained as having good network clarity & coverage for call completion/services

Research Objective:

The research objective is to find, how the rank order preferences for of SERVQUAL dimensions along with technical quality vary across demographic variables. Literature suggests that the Kruskal-Wallis test can be utilized to understand if the difference between the groups is significant. The test is nonparametric test for ranked data, wherein the nominal variable used as grouping variable. Since it is Non-parametric, the normality assumption has been dispensed with, further it has been assumed that the variation within the groups displays homoscedasticity. The Null hypothesis for the Kruskal-Wallis test has been taken as "the mean ranks of the groups are the same".

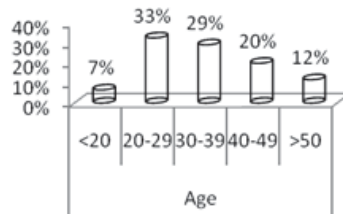
Reliability Statistics: Reliability Statistics was tested for the group of questions, the Cronbach's Alpha was found to be 0.715

### 3.2 Distribution of the respondents

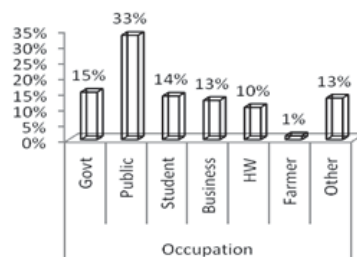
In the selected sample 22.5 percent (181) were female and 77 percent were male.

The age of the respondents were distributed as following; 6.6 percent were 20 years, 32.6 percent between 20 to 29 years, 29.1 percent between 30 to 39 years, 19.9 percent belonged to 40 to 49, 11.7 percent belonged above 50 years.

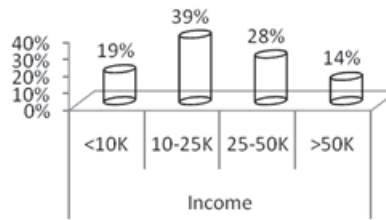
The mean age was indicated to be 29.98 and as per the scale in the questionnaire it is close to 29 years.



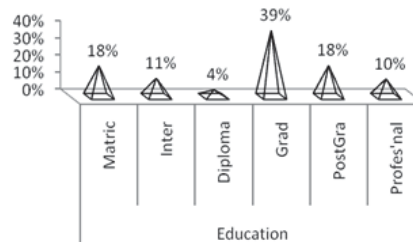
The profile in respect of occupation indicates that 15.2 percent of the sample size is public servant, 33.4 percent are private sector employees, 13.9 percent are students, 12.6 percent are business owners, 10.3 percent housewives, 1.2 percent of the sample are farmers and 13.3 percent belonged other categories.



The sample distribution with respect to family income per month indicates that 18.8 percent has income rupees 10000 per month, 39.2 percent were between rupees 10000 to 25000, 27.5 percent earned between rupees 25000 to 50000 and 14.4 percent has monthly income above Rupees 50000 per month. The mean income was 2.38 indicating the range of 25000 to 50000.



The sample distribution according to highest level of education indicates that 18.1 percent are matriculate, 10.7 percent intermediate, 3.9 percent diploma, 38.9 percent graduates, 18.2 percent Post graduates, and 10.3 percent were professionally qualified.



As per the location of stay 17.2 percent stayed in rural area, 31.3 percent in semi urban and 51.6 percent stayed in urban area.



#### 4. Test Results

For the tables of test result following abbreviations are taken to indicate the factors; Tangibility (Tan), Assurance (Ass), Responsiveness (Resp), Empathy (Emp), Reliability (Rel), Economy (Eco), Technical Quality (TechQ), Image (Img), Overall Satisfaction (OvSat).

Gender: The mean of different factors were subjected to T-Test with an hypothesized mean difference of zero, it indicated that for males Mean 4.0925, variance 0.026776; for female mean 4.265, variance 0.0211. The degrees of freedom was 16, t-Stat value was 2.36,  $P(T \leq t)$  one-tail 0.015679668, t Critical one-tail, 1.746,  $P(T \leq t)$  two-tail 0.03136, t Critical two-tail 2.11991. The test indicated that there does exist a difference between the genders which is significant. Further the data was grouped for male and female to check their ranking across different attributes: The test result is summarized as below.

**Table 1:** Mean Rank of Quality Dimension and Gender

	Tan	Ass	Resp	Emp	Rel	Eco	TechQ	Img	OvSat
Female, N=181	455.9	430.42	430.14	426.01	434.73	443.23	434.48	436.71	405.23
Male, N=622	386.3	393.73	393.81	395.01	392.48	390.00	392.55	391.90	401.06
Chi-Square	13.74	4.058	4.021	2.927	5.452	8.595	5.536	6.212	.061
Asymp. Sig.	.000	.044	.045	.087	.020	.003	.019	.013	.806

a. Kruskal Wallis Test; b. Grouping Variable: Gender; Df=1

Female: From the test result it could be inferred that the rank order of preference for the factors for females were

Tangibility, Economy, Image, Reliability, Technology, Assurance, Responsiveness, and Empathy. These rank orders of preference could be explained in the following terms. Technology usage with females could be low, therefore tangibility, economy and Image could be high on their priority list. It could also indicate that they may not be the actual buyers, they could be users of the services, but the services were bought by other family members. Similarly in case of any issue during the usage, they might ask the family members to resolve such issues. Thus for them assurance, responsiveness and empathy could be lower. Earlier research points (Macro, 2004) that female spend more time with the usage, their usage level is much higher compared to males. So they could be looking for Economy as a second priority. Nielsen study report 2014, on smart phone usage in India, indicates a gender gap of about 8% overall across all age groups, maximum gap being 13% for the age group of 25 to 30 years. In one of the articles, scientific American reported that in rural India there are cultural taboos on usage of mobiles. In few cases, village elders dissuade or ban mobile usage for unmarried women, there is a mindset that women may elope. A telecom industry advocacy group GSMA (for Groupe Speciale Mobile Association) report of 2010 indicates that in Asia women are 37 percent less likely than men to own a mobile phone, referring the highest gender gap. Indian women use mobile phones for self defense (<http://www.dw.de>)

Male: Male rank order preference were different from that of females and it indicated the following factors in the order of their ranks Empathy, Responsiveness, Assurance, Technology, Reliability, Image, Economy, and Tangibility. It could be explained that Empathy is higher possibly because it is still a status symbol for mobile services. High technology equipment, services and ever changing technology would make males attracted towards it to play around, also possible that males would want responsiveness to resolve any issue that could arise during its usage. The technical quality in both the cases of male and female is in the middle of priority. The reason could be that it is difficult for the common customer to understand the technology per se. It could be a superficial understanding about technology. However It has been reported that in case of mobile handset buying, males prefer latest technical functionalities and features than females. (Singh and Goyal, 2009)

Age: The result of Kruskal Wallis test run for different dimensions with respect difference of mean rank to Age is indicated as below.

**Table 2:** Kruskal Wallis test for Quality Dimensions and Age

	Tan	Ass	Resp	Emp	Rel	Eco	TechQ	Img	OvSat
Chi-Square	21.004	18.341	13.754	9.422	16.636	16.266	27.053	15.081	4.327
Asymp. Sig.	.000	.001	.008	.051	.002	.003	.000	.005	.364

a. Kruskal Wallis Test; b. Grouping Variable: Age; Df=4

The difference of ServQual dimensions with respect to age is significant at  $P=0.01$  except in case of empathy ( $p=0.051$ ). As found out, the difference of the factor "overall satisfaction" across age groups is not significant ( $p=0.364$ ).

Occupation: Does the rank order of preferences of different servqual dimensions vary as per occupation? This research had sample from different occupations such as public and private sector employees, student, business persons, house wives, farmers and others as different categories. The test result is tabulated as below.

**Table 3:** Kruskal Wallis test for Quality Dimensions and occupation

	Tan	Ass	Resp	Emp	Rel	Eco	TechQ	Img	OvSat
Chi-Square	46.303	24.131	24.307	12.007	19.449	15.297	7.975	18.594	15.768
Asymp. Sig.	.000	.000	.000	.062	.003	.018	.240	.005	.015

a. Kruskal Wallis Test; b. Grouping Variable: Occupation, Df=6

The test indicates that there is significant difference with different occupation as a group. Tangibility, assurance, responsiveness, reliability, Image show the variation at a significance level of  $p=0.01$ , whereas economy and overall satisfaction, shows variation with a significance level of 0.05. In case of Technical quality and empathy, the null hypothesis is accepted at a significance level of  $p=0.05$ . Social analyst David Chalke in one of the interviews (The Times of India) asserted, that the a persons pattern of mobile phone usage could indicate their attitude towards work, play and rest.

Income: The mean difference of dimensions along with technical quality, grouped with income as nominal variable has been tested and the test data is shown below.



**Table 4:** Kruskal Wallis test for Quality Dimensions and Income

	Tan	Ass	Resp	Emp	Rel	Eco	TechQ	Img	OvSat
Chi-Square	3.564	.079	.452	1.306	2.340	5.408	5.817	3.668	2.154
Asymp. Sig.	.312	.994	.929	.728	.505	.144	.121	.300	.541

a. Kruskal Wallis Test; b. Grouping Variable: Income, Df=3

The test result indicates that the difference of SERVQUAL dimension is not significant ( $p=0.05$ ). Thus the difference in the rank order for the dimensions is not significant with income as the grouping variable.

It is possible that for different income groups, the rank order of preferences for different service quality dimensions remain same. It can also be explained that the expenditure on mobile services forms a very insignificant part of one's income thus no significant variation is observed. The other explanation that could be attributed is, mobile communication being felt as an essential services across all income groups, thus is inelastic to the level of income.

Education: Highest level of education of sample respondents was considered with six categories. Upto ten years of education were considered as matriculate. The classification intended to capture educational attainment and any difference of rank order priorities for chosen quality dimensions.

It was hypothesized that with for respondents with different level of education, there would be no difference in the rank order priorities.

**Table 5:** Kruskal Wallis test for Quality Dimensions and Education

	Tan	Ass	Resp	Emp	Rel	Eco	TechQ	Img	OvSat
Chi-Square	7.459	12.080	13.290	12.833	8.091	23.979	22.766	4.539	3.279
Asymp. Sig.	.189	.034	.021	.025	.151	.000	.000	.475	.657

Grouping Variable: Education, Df=5

In the case of Education as a grouping variable; Economy, Technical Quality indicates indicate a difference ( $p=0.01$ ), whereas Responsiveness, Assurance and empathy indicates a difference at  $p=0.05$ . For other dimensions, the null hypothesis is accepted.

Thus it could imply that with different level of education, servqual dimension such as economy, technical quality, responsiveness, assurance, responsiveness empathy shows statistically significant difference. However the for dimensions such as Tangibility, Reliability, Image and overall Satisfaction, the difference is not significant.

Stay: The research had divided places of stay into three groups such as Rural, Semi-Urban and urban area.

**Table 6:** Kruskal Wallis test for Quality Dimensions and Area of Stay

	Tan	Ass	Resp	Emp	Rel	Eco	TechQ	Img	OvSat
Chi-Square	29.529	29.512	34.302	21.945	22.993	51.414	34.174	8.292	2.922
Asymp. Sig.	.000	.000	.000	.000	.000	.000	.000	.016	.232

a. Kruskal Wallis Test, b. Grouping Variable: Staying, Df=2

The test for difference in the rank order indicates that differences are significant except overall satisfaction. Overall satisfaction does not differ significantly with respect to place of stay. It could indicate that the factors of service quality dimension differ with respect to places of stay. In this case the null hypothesis was rejected.

## 5. Regression Analysis

Initially an Ordinal regression (logit) was taken with confidence interval of 95%, and overall satisfaction as dependent variable. The result indicated that Chi-Square value of 161.509, Df=52 and it was significant. The model indicated  $R^2=0.958$  and Standard Error of the Estimate was 0.845. However since the test indicated that 79.6% of cells with zero frequency the test was dropped for analysis. Instead linear regression through origin was resorted to for further analysis.

A linear regression analysis through origin (without intercept) was carried out with overall satisfaction as dependent variable. It was assumed that if the predictor variables are zero, then the resulting satisfaction would be zero. So in these

conditions the regression line must pass through the origin. Demographic and SERVQUAL dimensions were taken as predictor variables (Image, Occupation, Gender, Education, Income, Age, Staying, Tangibility, Empathy, Reliability, Assurance, Technical Quality, Economy, and Responsiveness).

The model indicated R square value of 0.958 and standard error of the estimate 0.845. Other parameters as per the test result have been indicated as below.

**Table 7:** ANOVA, Linear Regression through the Origin

Model	Sum of Squares	Df	Mean Square	F	Sig
Regression	12928.160	13	994.474	1393.364	.000 <sup>a</sup>
Residual	563.840	790	.714		
Total	13492.000 <sup>b</sup>	803			

**Table 8:** Regression coefficients, Linear Regression through the Origin, Dependent variable "Overall Satisfaction"

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Age	.071	.027	.055	2.646	.008
Occupation	.057	.015	.053	3.826	.000
Income	.125	.033	.078	3.814	.000
Education	.039	.020	.038	1.945	.052
Staying	.145	.042	.087	3.426	.001
Tangibility	.066	.034	.063	1.924	.055
Assurance	.277	.050	.283	5.544	.000
Responsiveness	-.070	.053	-.073	-1.315	.189
Empathy	.145	.047	.152	3.063	.002
Reliability	.097	.049	.102	2.001	.046
Economy	-.039	.052	-.041	-.760	.447
Technical Quality	.024	.049	.026	.498	.618
Image	.176	.039	.186	4.500	.000

The regression model on the selected sample response indicates that "Responsiveness", "Economy" and "Technical quality" are not significant. But these factors have difference as per the Kruskal-Walis test for different demographic variable. Non significant result could be related to the sampling distribution. The selected independent variables explain the overall satisfaction in a significant way. The result also could be specific to the sample response received for this study.

## 6. Discussion and Conclusion

The findings suggest that the dimensions of SERVQUAL and demography are related to overall customer satisfaction in a significant manner; however the priorities among the service quality dimensions do vary across demography. It does imply the multiplicity of services and complexity arising out of such multiplicity. This fact is observed in case of telecom industry players in the different offers of services; value added services and seasonality of services. At the same time, service providers have to manage the complexity arising out of such multiplicity.

The findings also indicate challenges to entrepreneurs of service sectors. Typical entrepreneur with low resource bases starts with a focussed offering to the market. However has to scale up appropriately for multiplicity of services, keeping in view of the customer priorities for difference service quality dimension. Customer satisfaction in different factors of the quality dimensions have to be differentiated; thus necessitating innovation in service delivery process.

## References

- Agnihotri, S., Sivasubramanian, N., & Simmons D. (2002), Leveraging technology to improve field service. International Journal of Service Industry Management, 13, 47-68.
- Ahmed, I., Nawaz Muhammed, M., Usman A., Shaukat Z., Ahmed N. and Rahman W. (2010). A mediation of customer satisfaction



- relationship between service quality and repurchase intentions for the telecom sector in Pakistan: A Case study of university students, *African Journal of Business Management* Vol.4 (16) 18 Nov. 2010 ISSN 1993-8233@2010 Academic Journals. pp 3457-3462.
- Ajzen, I. and Fishbein, M. (1980), *Understanding Attitudes and Predicting Social Behavior*, Prentice-Hall, Englewood Cliffs, NJ.
- Anton, J., *Call Center Management by the Numbers*, Purdue University Press/Call Center Press, Annapolis, MD, 1997.
- Asubonteng, P., McCleary, K. J., & Swan, J. E. (1996). SERVQUAL, revisited: A critical review of service quality. *Journal of Services Marketing*, 10, 62-81.
- Bolton, R. N., & Drew, J. H. (1991b). A Longitudinal Analysis of the Impact of Service Changes on Customer Attitudes. *Journal of Marketing*, 55, 1-9.
- 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*, 30, 7-27.
- Brady, M. K., & Cronin, Jr. J. J. (2001). Some new thoughts on conceptualizing perceived service quality: A hierarchical approach. *Journal of Marketing*, 65, 34-49.
- Cadotte, E. R., Woodruff, R. B., & Jenkins, (1987). Expectations and norms in models of customer satisfaction, *Journal of Marketing Research*, 24, 305-314.
- Carman, J., M., (1990). Consumer perceptions of service quality: An assessment of the SERVQUAL dimensions. *Journal of Retailing*, 66, 33-55.
- Churchill, Jr. G. A., & Surprenant, C. (1982). An investigation into the determinants of customer satisfaction. *Journal of Marketing Research*, 14, 491-504.
- Coye, R. W. (2004). Managing customer expectations in the service encounter. *Industrial Journal of Service Industry Management*, 15, 54-71.
- Cronin, J. J. and Taylor, S. A., (1992), "Measuring Service Quality: A Reexamination and Extension", *Journal of Marketing*, Volume 56, Number 3, Pages 55-68, 1992.
- Cronin, Jr. J. J. (2003). Looking back to see forward in services marketing: Some ideas to consider, *Managing Service Quality*, 13, 332-337.
- Cronin, Jr. J. J., & Taylor, S. A. (1992). Measuring service quality: A reexamination and extension. *Journal of Marketing*, 56, 55-68.
- Dabholkar, P. A., Thorpe, D. I., & Rentz, J. O. (1996), A measure of service quality for retail stores: Scale development and validation. *Journal of the Academy of Marketing Science*, 3-16.
- Danaher, J. P., & Haddrell, V. (1996). A comparison of question scales used for measuring customer satisfaction. *International Journal of Service Industry Management*, 7, 6-28.
- Fullerton, G., & Taylor, S. (2002). Mediating, interactive, and non-linear effects in service quality and satisfaction with services research. *Canadian Journal of Administrative Sciences*, 19, 124-136.
- Gronroos, C. (1984). A service quality model and its marketing implementations. *European Journal of Marketing*, 18, 36-44.
- Gronroos, C. (1988). Service quality: The six criteria of good perceived service. *Review of Business*, 9, 10-13.
- Gronroos, C. (1993). Toward a third phase in service quality research: Challenges and future directions, in T. A. Swartz, D. E. Bowen & S. W. Brown (Eds.), *Advances in Services Marketing and Management*, Vol. 2, JAI Press, Greenwich, CT, pp. 49-64.
- Gronroos, C. (1998). Marketing services: The case of the missing product. *The Journal of Business and Industrial Marketing*, 13, 322-332.
- Gronroos, C. (1999). Internationalization strategies for services. *Journal of Services Marketing*, 13, 290-302.
- Hanif M., Hafeez S., Riaz A., (2010). Factors Affecting Customer Satisfaction, *International Research Journal of Finance and Economics* ISSN 1450-2887 ISSUE 60(2010) pp 44-52.
- Holbrook, M. B., & Corfman, K. P. (1985). Quality and value in consumption experience: Phaldrus rides again. In J. Jacoby & J. Olson, *Perceived quality* (31-57). Lexington, MA: Lexington Books.
- Iacobucci, D., Grayson, K., & Ostrom, A. (1994b). The calculus of service quality and customer satisfaction: Theoretical and empirical differentiation and integration. In T. A. Swartz, D. E. Bowen & S. W. Brown (Eds.), *Advances in Services Marketing and Management* Vol 3, (pp. 1-67). Greenwich, CT: JAI Press.
- Iacobucci, D., Grayson, K., & Ostrom, A. (1994b). The calculus of service quality and customer satisfaction: Theoretical and empirical differentiation and integration. In T. A. Swartz, D. E. Bowen & S. W. Brown (Eds.), *Advances in Services Marketing and Management* Vol 3, (pp. 1-67). Greenwich, CT: JAI Press.
- Ibrahim M. S., Sadiq N., Sajjid A., (2011). Impact of Ethical practices on Quality of Services of bile Telecom Companies: Case Study of Pakistan. *African journal of Business Management* Vol.8 (24) 2011 pp 357-362
- Ismali Hishamudi and Khatibi Ali (2004). Study of the Relationship between Perception of value and price and customer satisfaction: The case of Malaysian Telecommunications Industry. *Journal of American Academy of Business*, Cambridge; Mar 2004; 4, ½; ABI/INFOM pp 309-313.
- Kang, G., & James, J. (2004). Service quality dimensions: An examination of Gronroos's service quality model. *Managing Service Quality*, 14, 266-277.
- Khan Inamullah (2012). Impact of customers Satisfaction And Customers Retention on Customers Loyalty. *International Journal of Scientific & Technology Research* Volume 1, Issue 2, March 2012. ISSN 2277-8616 pp 106-110.
- Khokhar Shahid Zaman, Hussain Farooq, Qureshi Tahir Masood, Anjum Ibrahim, Samran Ali and Arshad Rizwan (2011). Only customer satisfaction and customer loyalty is not enough: A study of Pakistan's telecom sector. A study of Pakistan's telecom sector.

- African Journal of Business Management Vol.5 (24), 14 October 2011. pp. 10176-10181.
- Lehtinen, U., & Lehtinen, J. R. (1982). Service quality: A study of quality dimensions. Working paper. Helsinki, Finland: Service Management Institute.
- Lovelock, C. H. (1983). Classifying services to gain strategic marketing insights, *Journal of Marketing*, 47, 9-20.
- Lovelock, C. H. (2001). *Services Marketing: People, technology, strategy* (4th ed.). Upper Saddle River, NJ: Prentice Hall.
- McAlexander, J. H., Kaldenberg, D. O., & Koenig, H. F. (1994). Service quality measurement. *Journal of Healthcare Marketing*, 14, 34-41.
- McDougall, G. H., & Levesque, T. J. (1994). A revised view of service quality dimensions: An empirical investigation. *Journal of Professional Services Marketing*, 11, 89-209.
- Mels, G., Boshoff, C., & Nel, D. (1997). The dimensions of service quality: The original European perspective revisited. *Service Industries Journal*, 17, 173-189.
- Miller, J. A. (1977). Studying satisfaction, modifying models, eliciting expectations, posing problems, and making meaningful measurements. In K. H. Hunt, *Conceptualization and measurement of consumer satisfaction and dissatisfaction*, (pp. 72-91). Bloomington, IN: Indiana University.
- Nawaz Noor – UL- Ain and Usman Ahmad (2011). What makes Customers Brand Loyal: A study on Telecommunication Sector of Pakistan. *International Journal of Business and Social Science* Vol.2 No.14, www.ijbssnet.com pp 213-221.
- Ojo Olu (2010). The Relationship Between Service Quality and Customer Satisfaction in the Telecommunication Industry: Evidence From Nigeria. *BRAND, Broad Research in Accounting, Negotiation and Distribution* ISSN 2067-8177, Vol.1, Issue1, 2010. pp 88-100.
- Oliver, R. L. (1981). Measurement and evaluation of satisfaction process in retail settings. *Journal of Retailing*, 57, 25-48.
- Oliver, R. L. (1993). A conceptual model of service quality and service satisfaction: Compatible goals, different concepts. In T. A. Swartz, D. E. Bowen, & S. W. Brown (Eds.), *Advances in Services Marketing and Management*, Vol. 2, (pp. 65-85). Greenwich, CT: JAI Press.
- Oliver, R. L. (1993). Cognitive, affective, and attribute bases of the satisfaction response. *Journal of Consumer Research*, 20, 418-430.
- Oliver, R. L. (1997). *Satisfaction: A behavioral perspective on the consumer*. New York: McGraw- Hill Companies, Inc.
- Oliver, R., L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, 17, 460-469.
- Olson, J. C., & Dover, P. (1979). Disconfirmation of consumer expectations through product trial. *Journal of Applied Psychology*, 64, 179-189.
- Parasuraman, A. (1998). Customer service in business-to-business markets: An agenda for research. *Journal of Business & Industrial Marketing*, 13, 309-321.
- Parasuraman, A., Berry, L. L., & Zeithaml, V. A. (1991). Refinement and reassessment of the SERVQUAL scale. *Journal of Retailing*, 67, 420-450.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing*, 49, 41-50.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64, 12-40.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64, 12-40.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1994a). Reassessment of expectations comparisons as a comparison standard in measuring service quality: Implications for further research. *Journal of Marketing*, 58, 11-124.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1994b). Alternate scales for measuring service quality: A comparative assessment based on psychometric and diagnostic criteria. *Journal of Retailing*, 70, 201-230.
- Portela Sofia, Menezes Rui (2010). An Empirical Investigation of the Factors that Influence the Customer Churn in the Portuguese Fixed Telecommunications industry: A Survival Analysis Application. *The Business Review*, Cambridge \*Vol.14\* No.2\* Summer\* 2010. pp 98-103.
- Ranaweera Chatura (2007). Are satisfied long-term customers more profitable? Evidence from the telecommunication Sector. *Journal of Targeting Measurement and Analysis for Marketing*. Vol-15, 2007. pp 113-120.
- Rust, R. T., & Oliver, R. L. (1994). *Service Quality: New directions in theory and practice*. Thousand Oaks, CA: SAGE Publications.
- Santos J. (2002). From intangibility to tangibility on service quality perceptions: A comparison study between consumers and service providers in four service industries. *Managing Service Quality*, 12, 292-302.
- Schneider, B., & White, S. S. (2004). *Service quality: Research perspectives*. Thousand Oaks, CA: Sage Publications, Inc.
- Shostack, G. L. (1977). Breaking free from product marketing. *Journal of Marketing*, 41, 73-80.
- Singh, J. and Goyal, B.B. (2009), Mobile Handset Buying Behavior of Different Age and Gender Groups, *International Journal of Business and Management*, vol 4, no 5, 2009, 179-187
- Spreng, R. A., & Mackoy, R. D. (1996). An empirical examination of a model of perceived service quality and satisfaction. *Journal of Retailing*, 72, 201-214.
- Stum, D. L. and Thiry, A., "Building Customer Loyalty", *Training and Development Journal*, Volume 45, Number 3, Pages 34-36, 1991.
- Swan, J. E., & Trawick, F. I. (1981). Disconfirmation of expectations and satisfaction with a retail service. *Journal of Retailing*, 57, 49-67.
- Swanson, S. R., & Davis, C. (2003). The relationship of differential loci with perceived service quality and behavioral intent. *Journal of*

- Services Marketing, 17, 202-218.
- Szmigin, I. T. D. (1993). Managing quality in business-to-business services. *European Journal of Marketing*, 27, 5-21.
- Westbrook, R.A. and Oliver, R.L. (1981), "Developing better measures of consumer satisfaction: some preliminary results", in Monrow, K.B. (Ed.), *Advances in Consumer Research*, Association for Consumer Research, Ann Arbor, MI, pp. 94-9.
- Wong Ken Kwong – Kay (2011). Using Cox regression to model customer time to churn in the wireless telecommunications industry. *Journal of Targeting, Measurement and Analysis for Marketing* Vol.19, 1. pp 37-43.
- Woodruff, R. B., Cadotte, E. R., & Jenkins, R. L. (1983). Modeling consumer satisfaction processes using experience-based norms. *Journal of Marketing Research*, 20, 296-304.
- Zeithaml, V. A., & Bitner, M. J. (2000). *Services Marketing* (2nd ed.). Boston: Irwin McGraw- Hill.

### **Web Resources**

- <http://timesofindia.indiatimes.com/home/science/Cellphone-offers-clue-to-your-personality/articleshow/7394617.cms>
- Nielsen Study report 2014, <http://www.nielsen.com/content/dam/corporate/in/docs/reports/2014/nielsen-featured-insights-smartphone-surge-in-india-continues.pdf>
- Report by London-based telecom industry advocacy group GSMA (for Groupe Speciale Mobile Association) and the Cherie Blair foundation.
- <http://www.scientificamerican.com/article/mobile-phones-for-women/> accessed on 11/02/2015
- <http://www.dw.de/indian-women-use-mobile-phones-for-self-defense/a-16035475> accessed on 11/02/2015
- Role of mobile for Women, [http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2013/01/GSMA\\_Women\\_and\\_Mobile-A\\_Global\\_Opportunity.pdf](http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2013/01/GSMA_Women_and_Mobile-A_Global_Opportunity.pdf) accessed on 6-02-2015
- The Impact of Mobile Phones on the Status of Women in India, May 2009, Dayoung Lee
- [https://economics.stanford.edu/files/Honors\\_Theses/Theses\\_2009/Lee,%20D.%202009.pdf](https://economics.stanford.edu/files/Honors_Theses/Theses_2009/Lee,%20D.%202009.pdf) accessed on 11/02/2015
- Market Analysis and Research Organisation report 2004, [itu.int/osg/spu/ni/futuremobile/socialaspects/IndiaMacro\\_MobileYouthStudy04.pdf](http://itu.int/osg/spu/ni/futuremobile/socialaspects/IndiaMacro_MobileYouthStudy04.pdf)