A PRACTICAL APPROACH TOWARDS TELECOMMUNICATION SERVICES IN MEERUT CITY, UTTAR PRADESH, INDIA: SERVICE QUALITY AND CUSTOMER LOYALTY VS. CUSTOMER SATISFACTION

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Abstract

The telecom sector is one of the fastest-growing industries globally. At the moment, India is the second-biggest telecom market globally. This paper aims to critically investigate whether customer satisfaction in Meerut, Uttar Pradesh, India, is influenced by service quality and customer loyalty. The relationship between customer satisfaction (the dependent variable) and service quality (the independent variables) was examined using a descriptive approach. Data was gathered from 530 telecom sector customers in Meerut city using a survey. Version 20 of SPSS was utilized for data analysis. Based on client satisfaction, there is a noteworthy correlation between service quality and customer loyalty. Academic researchers, managers, and practitioners involved in the field will find the study beneficial.

Keywords: Customer satisfaction, Customer loyalty, Service quality, Telecommunication services.

1. Introduction

The invention of the telegraph marked the beginning of communication in India. The Oriental Telephone Company Limited of England was given permission by the government in 1881 to establish phone exchanges in Calcutta, Bombay, Madras, and Ahmedabad. Major E. Baring, a member of the Council of the Governor General of India, opened the telephone exchanges in Calcutta, Bombay, and Madras on January 28, 1882. India's introduction to the internet began in Delhi on August 15, 1995.1.2 Internet and mobile phones With 1173.76 million subscribers as of December 31, 2020 (TRAI 2021), India's mobile telecommunications system is the

second largest globally. The Department of Telecommunications (DoT) reports that as of January 2021, there were 1157.75 million wireless users in India, up from 969.54 million in 2021.

2.Objective of the Study

This study seeks to examine the effects of the relationship between the independent variables (servicequality and customer loyalty) and the dependent variable (customer satisfaction) in respect to telecomsector in Meerut city. As, the telecom industry is facing immense competition and there are mergersand acquisitions from last many years it is now very much important to understand what makes the customer satisfied.

3. Research Gap

Parasuraman et al., (1985) developed a conceptual model of service quality where the authors identified five gaps that could impact consumer's evaluation of service quality. In telecom Customer'sexpectations are what customers thinks according to his available resources which can be influenced by his demographics, advertising, experience with similar other products, information available onlineetc. Further after the product has been selected by the customer it leads to other gaps such as communication gap, after sales service gap, policy gap and moreover delivery gap which instead affects the customer satisfaction.

4. Research Methodology

4.1 Research design

In words of McBurney (1994), "survey research infers to the accessing of public opinion through the questionnaire". In words of Zikmund et al., (2003), "research design refers to the detailed plan of a study that specifies the procedures and methods for collecting and analysing the data for the purpose of obtaining the solution for a research problem". In our research survey was done with the help of a structured questionnaire, making it a survey research design. Demographic factors as well as study variables were analysed quantitatively through various statistical processes and methods.

4.2 Research problem

India in the field of telecommunication sector is the second largest in terms of total telephone users allover the world. In last few years there have been various mergers and acquisitions due to ups and downs in the telecommunication industry. Moreover, there has been a big question mark for the telecommunication operators how to prevent customer churn in the telecommunication sector. This study has focused on the impact that telecommunication marketing has made on customer's perceptionand thereby loyalty. In the present study

impact of marketing of telecommunication services on customer perception and loyalty has been quantitatively analysed.

4.3 Sampling design population

Population refers to the customers who are eligible to take part in a research survey. In the present study customers of Meerut city using smart phones or bar phones of any type having a telecommunication operator were contacted. Also the sub segments like age, gender, occupation and education were covered so that the study is comprehensive and no related gap is left out.

4.4 Sampling unit

As per Krejcie and Morgan (1970), "A sample size of 384 is more than sufficient to represent a population of 10, 00,000". A sample size of 530 customers for Meerut City was selected. In the study all four of the telecommunication operators involved by the selected customers were taken into account for the sample so as to assure that the sample could be analysed quantitatively in a non-biased way.

4.5 Data collection design

For data collection the customers having mobiles were contacted. Those who have bar phones using multiple SIM's were also entertained as they have their different logic of using such phones because they use to switch the companies after the introductory offer is over. Varieties of customers were involved in the study so that most of the sample population gets covered. This shall help in our study to explore effect of various parameters.

4.6 Procedure of data collection

Questionnaire was distributed among various people in the Meerut city by the researcher himself. In the survey all the retailers, distributors, officials related to telecommunication companies were involved as they provided different ideas and experience of how and what should be the better ways to explore the data. The people around the backward areas of the city were also covered as it was important to find out how low income groups fulfil their telecommunication requirements.

4.7 Research instrument design

For our study a structured questionnaire was developed and distributed among the customers in Meerut city. It was scaled to 5 point likert type scale and all the study variables were studied and analysed from a literature review. It helped us in the best possible way to get transparent and useful outcome for the telecommunication sector as well as customers.

4.8 Measurement scale

All the questions were put on a scale from 1 to 5where, 1,2,3,4 and 5 stands for-

1. Strongly disagree

2. Disagree

3. Neutral

4. Agree

5. Strongly agree

Following are the study variables and the questions (Table 1) designed for the customers taken from the literature (Hellier et al., 2003; Levesque and McDougall 1996; Morgan and Hunt 1994; Jones et al., 2000).

Table 1 Study variables

S.No.	Study variables	Questions framed
1	Customer satisfaction	5
2	Switching cost	4
3	Service quality	30
4	Inertia	3
5	Customer loyalty	5
6	Customer perceived value	3

4.9 Proposed conceptual framework

In order to test the hypotheses i.e. the relationship between the independent variables (service qualityand customer loyalty) and the dependent variable (customer satisfaction), the study has designed a hypothesis as shown in Figure 2.
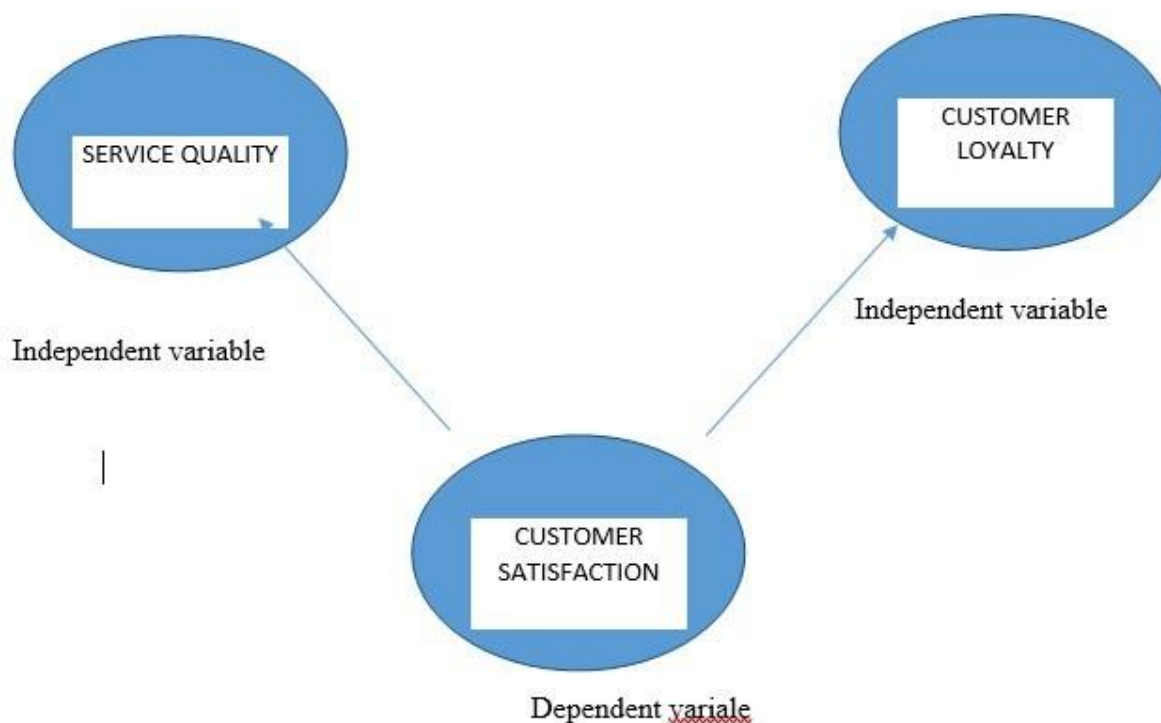
Figure 2 Developed study model

6. Results and Discussion

6.1.Demographic construct of respondents

The demographic analysis was carried out of the 530 population, 342 (64.5%) were male while 158 (29.81%) were female. The results of the study displayed the influence of age groups from 21-35 (29.0%) followed by 36-45 (24.33%) were observed. The findings showed that customers with highersecondary other than professional, bachelor and master's degree were in bulk 187 (35.2%) followed by graduation degree holders, below higher secondary, post graduates and professional certificate holders representing 143 (26.9%), 86 (16.2%), 73 (13.7%) and 41 (7.7%) respectively in Meerut city.The results are presented in Table 2.

Table 2: Demographic study

GROUP A	AGE	FREQUENCY	PERCENT	CUMULATIVE PERCENTAGE
1	BELOW 20	55	10.37	10.37
2	21-35	154	29.0	37.54
3	36-45	129	24.33	63.77
4	46-60	109	22.5	84.33
5	61-80	83	13.8	100

GROUP B	**GENDER**	FREQUENCY	PERCENT	CUMULATIVE PERCENT
1	MALE	342	64.5	64.52
2	FEMALE	188	35.4	100
GROUP C	**MARITAL STATUS**	FREQUENCY	PERCENT	CUMULATIVE PERCENT
1	MARRIED	372	70.18	70.18
2	UNMARRIED	158	29.81	100
GROUP D	**EDUCATIONAL QUALIFICATION**	FREQUENCY	PERCENT	CUMULATIVE PERCENT
1	BELOW HR.SECONDARY	86	16.2	16.2
2	HR.SECONDARY	187	35.2	51.5
3	GRADUATION	143	26.9	78.4
4	POST GRADUATION	73	13.7	92.2
5	DOCTOR/ENGINEER/CA/Ph.D.	41	7.7	100
GROUP E	**EMPLOYMENT PATTERN**	FREQUENCY	PERCENT	CUMULATIVE PERCENT
1	BUSINESS	64	12.07	12.0
2	GOVT SECTOR EMPLOYEE	127	23.96	36.0
3	PVT SECTOR EMPLOYEE	198	37.35	73.39
4	STUDENTS	101	19.05	92.45
5	OTHERS	40	7.54	100
GROUP F	**INCOME**	FREQUENCY	PERCENT	CUMULATIVE PERCENT
1	BELOW Rs 10000	151	28.4	28.4
2	Rs. 10000-25000	129	24.3	52.8
3	Rs. 25000-50000	112	21.1	73.9
4	Rs. 50000-75000	74	13.9	87.9
5	Above-Rs 75000	64	12.0	100
GROUP G	**NAME OF SERVICE PROVIDER**	FREQUENCY	PERCENT	CUMULATIVE PERCENT
1	AIRTEL	151	28.5	28.4
2	RELIANCE JIO	187	35.3	63.7
3	VODA IDEA	137	25.8	89.6
4	BSNL	55	10.4	100
GROUP H	**TYPE OF CONNECTION**	FREQUENCY	PERCENT	CUMULATIVE PERCENT
1	PRE PAID	501	94.5	94.52

2	POST PAID	29	5.5	100
	TOTAL RESPONDENTS	**530**	100	

6.2. Pearson's correlation analysis

The correlation analysis explains relationship between independent variables (service quality and customer loyalty) and dependent variable (customer satisfaction). The correlation between the variables, r=0.414 for service quality and r=0.072 for customer loyalty and p=0.0001. The strength ofthe relationship can be said to be positive for service quality in case if there is a unit of increase in service quality than there will be a further increment of customer satisfaction by 0.414 (Table 2) predictresults. Results of the study are consistent with the work of Liat et al., (2014) "who found out that service quality has a significant and positive direct relationship with customer loyalty". Also, for customer loyalty case if there is a unit increase in customer loyalty than there will be a further increment of customer satisfaction by 0.072 (Table 3) predicts the results.

Table 3 Showing Pearson's correlation between service quality and customer loyalty on customer satisfaction

Correlations				
		CS TOTAL	SQ TOTAL	CL TOTAL
Pearson Correlation	CS TOTAL	1.000	.414	.072
	SQ TOTAL	.414	1.000	.876
	CL TOTAL	.072	.876	1.000
Sig. (1-tailed)	CS TOTAL		.000	.049
	SQ TOTAL	.000		.000
	CL TOTAL	.049	.000	
N	CS TOTAL	530	530	530
	SQ TOTAL	530	530	530
	CL TOTAL	530	530	530

6.3. Analysis of linear regression statistics

In Table 4 the model summary with the help of linear regression in which we have taken independentvariables (service quality and customer loyalty) and the dependent variable (customer satisfaction) hasbeen depicted. It can be analysed that R square value comes 0.536 which implies that 53.6% independent variables influences the dependent variables. It is also in consonance with the study of Allan (2016) "who found that service quality positively affects loyalty".

Table 4 Model summary

Correlations

		CS TOTAL	SQ TOTAL	CL TOTAL
Pearson Correlation	CS TOTAL	1.000	.414	.072
	SQ TOTAL	.414	1.000	.876
	CL TOTAL	.072	.876	1.000
Sig. (1-tailed)	CS TOTAL		.000	.049
	SQ TOTAL	.000		.000
	CL TOTAL	.049	.000	
N	CS TOTAL	530	530	530
	SQ TOTAL	530	530	530
	CL TOTAL	530	530	530

6.4. Analysis of ANOVA

Table 5 shows the ANOVA analysis in which we have taken independent variables (service quality and customer loyalty) and the dependent variable (customer satisfaction). It can be analysed that thereis a significant level of 0.00c which is less than 0.05 which indicates acceptance that there is strong relationship between the independent (service quality and customer loyalty) and the dependent variables (customer satisfaction). The output of the study support the work of Liu et al., (2018) "whichrevealed a strong correlation between customer satisfaction and customer loyalty".

Table 5 ANOVA analysis

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3267.915	1	3267.915	109.211	.000[b]
	Residual	15799.360	528	29.923		
	Total	19067.275	529			
2	Regression	10215.279	2	5107.640	304.081	.000[c]
	Residual	8851.996	527	16.797		
	Total	19067.275	529			
a. Dependent Variable: CS TOTAL						
b. Predictors: (Constant), SQ TOTAL						
c. Predictors: (Constant), SQ TOTAL, CL TOTAL						

6.5. Coefficients

From the coefficient analysis (Table 6) the beta value calculated is 1.512 for SQ TOTAL and 1.253 for CL TOTAL that implies that there is direct relationship between the independent and the dependent variables also, this

can be understood with the help of an equation which tells us how the independentvariables act to the dependent variables.

Y= a0+a1x1+a2x2

Where, Y is customer satisfaction (CS)

x1 is service quality (SQ)

x2 is customer loyalty (CL)

a0, a1 and a2 are the beta values

When, we complete this equation using the beta value this will further look like CS= 0.414+1.512(SQ) +1.253(CL)

It can be concluded that SQ and CL are directly associated with CS and if any one of them increase than the CS will increase. Also the findings of the study correlate with the study of Joudeh and Dandis(2018) this can be further clarified by Figure 3.

Table 6 Coefficients

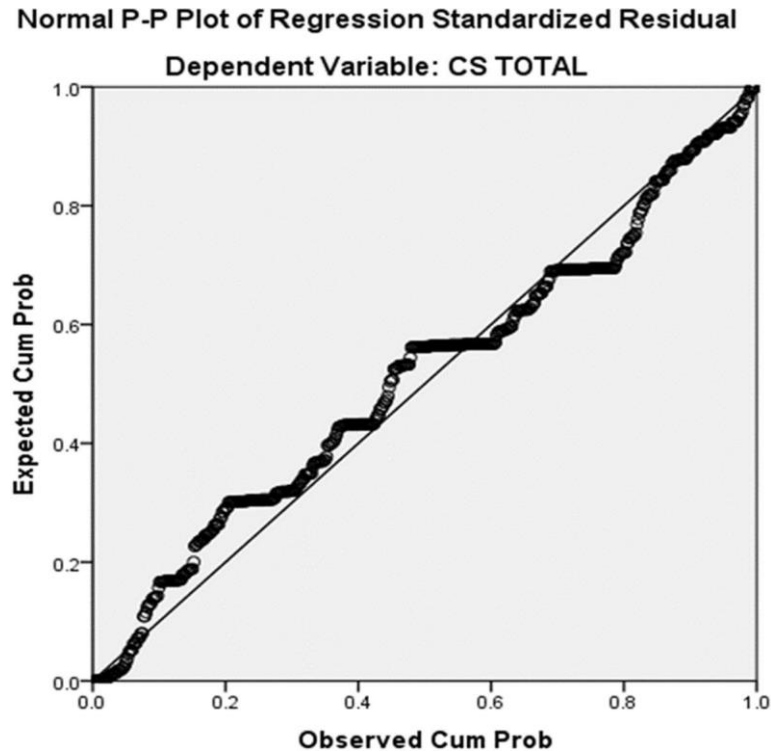| ANOVA[a]						
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	Total	19067.275	529			
a. Dependent Variable: CS TOTAL						
b. Predictors: (Constant), SQ TOTAL						
c. Predictors: (Constant), SQ TOTAL, CL TOTAL						

a. Dependent Variable: CS TOTAL

Figure 3 Plotting

7.Implications

1.This study will help the customers to understand the scenario of telecom services in the city and there by selecting a better option for them in future.

2.The benchmarking analysis shall help to understand whether the current execution of the telecomprovider is constant and ineffective.

3.The results may have implications for holding customers in this era of competition and maturedtelecom sector.

4.The study emphasises on corporate brand building for mobile phone companies.

8.Conclusion

The statistics analysis showed that there was a significant relationship between independent variables(service quality and customer loyalty) and the dependent variable (customer satisfaction) as demonstrated by the beta value which was found to be 1.512 for SQ TOTAL and 1.253 for CL TOTAL.ANOVA and Pearson's Correlation Analysis suggested the same significance between the variables as the ANOVA significant level was found to be 0.00cwhich was less than 0.05.

References:

• Akbar, M. M., and Parvez, N. B. (2019). Impact of service quality, trust, and customer satisfaction on customers loyalty. ABAC Journal, 29, 24-38.

• Al-Dmour, H., and Al-Shraideh, M. T. (2018). The influence of the promotional mix elements on Jordanian consumer's decisions in cell phone service usage: An analytical study.Jordan Journal of Business Administration, 4, 375-392.

• Allan, M. M. (2016). The relationship between service quality and customer satisfaction and retention in Ghana's luxury hotels. IUP Journal of Marketing Management, 15.

• Alshurideh, M. T. (2017). A theoretical perspective of contract and contractual customer- supplier relationship in the mobile phone service sector. International Journal of Business and Management, 12, 201-210.

• Arora, P., and Narula, S. (2018). Linkage between service quality, customer satisfaction andcustomer loyalty: A literature Review. The IUP Journal of Marketing Management, 17, 30-36.

• Caruana, A. (2022). Service loyalty the effects of service quality and the mediating role of customer satisfaction. European Journal of Marketing, 36, 811-828.

• Chopra, R., Chawla, M., and Sharma, T. (2014). Service quality in higher education: A comparative study of management and education institutions, NMIMS Management Review, 24, 59-72.

• Hellier, P. K., Geursen, G. M., Carr, R. A., and Rickard, J. A. (2013). Customer repurchaseintention. A general structural equation model. European Journal of Marketing, 37, 1762- 1800.

• Herington, C., and Weaven, S. (2017). Can banks improve customer relationships with highquality online services? Managing Service Quality: An International Journal, 17, 404-427.

• Hirmukhe, J. (2012). Measuring internal customers' perception on service quality using SERVQUAL in administrative services. International Journal of Scientific and Research Publications, 2, 1- 6.

• Jones, M. A., Mothersbaugh, D. L., and Beatty, S. E. (2000). Switching barriers and repurchase intentions in services. Journal of retailing, 76, 259–274.

• Joudeh, J. M., and Dandis, A. (2018). Service Quality, Customer Satisfaction and Loyalty in an Internet Service Providers. International Journal of Business and Management, 13, 108-120.

• Kotler, P., and Keller, K. L. (2019). A framework for marketing management. 4th Edition. New Jersey: Pearson Prentice Hall.

• Krejcie, R. V., and Morgan, D. W. (1970). Determining sample size for research activities. Educational and Psychological Measurement, 30, 607-610.

• Lai, C. S., and Nguyen, M. C. (2017). Factors affecting service quality, customer satisfactionand loyalty of

mobile phone service providers in Vietnam. International Journal of Organizational Innovation, 10, 75-85.

• Levesque, T., and McDougall, G. H. G. (1996). Determinants of customer satisfaction in retail banking. International Journal of Bank Marketing, 14, 12–20.

• Liu, H., Chen, Y., Zha, Y., Ling, L., and Wang, D. (2018). The effect of satisfaction on loyalty in consumption and service industry based on meta-analysis and it's algorithm. Wireless Personal Communications, 103, 963-982.

• Manusamy, J., Chelliah, S., and Mun, H. W. (2010). Service quality delivery and its impacton customer satisfaction in the banking sector in Malaysia, International Journal of Innovation, management and Technology, 1, 398-404.

• McBurney, D. H. (1995). The problem method of teaching research methods. Teaching of Psychology, 22, 36-38.

• Newman, K. (2001). Interrogating SERVQUAL: a critical assessment of service quality measurement in a high street retail bank. International journal of bank marketing, 19, 126- 139.

• Nimako, S. G. (2022). Linking quality, satisfaction and behaviour intentions in Ghana's mobile telecommunication industry, European Journal of Business and Management, 4, 1- 18.

• Nurysh, N., Naghavi, N., Chan, B., and Fah, Y. (2019). Study on Factors AffectingCustomer Satisfaction in Mobile Telecommunication Industry in Malaysia. International Journal of Recent Technology and Engineering, 7, 299-306.

• Obeidat, B., Sweis, R., Zyod, D., and Alshurideh, M. (2022). The effect of perceived servicequality on customer loyalty in internet service providers in Jordan. Journal of ManagementResearch, 4, 224-242.

• Opele, A. M., Afolabi, O. J., and Adetayo, H. O. (2020). Service quality and preference for Mobile Telecommunications Service providers among students of tertiary institutions in Lagos state. Nigerian Journal of Technology, 39, 484–492.

• Parasuraman, A., Zeithaml, V. A., and Berry, L. L. (1985). A conceptual model of service quality and its implications for future research. Journal of marketing, 49, 41-50.

• Patterson, K. (1997). Delighted clients are loyal clients. Rough Notes, 140, 221-234.

• Paulrajan, R., and Rajkumar, H. (2021). Service quality and customers preference of cellularmobile service providers. Journal of Technology Management and Innovation, 6, 38-45.

• Prabhakaran, S., and Satya, A. S. (2013). An insight into service attributes in banking sector. Journal of Services Research, 3, 157.

• Rahman, M. S. (2022). Service quality, corporate image and customer's satisfaction towards customer's perception: An exploratory study on telecom customers in Bangladesh, Semanticscholar, 5, 56-63.

• Saleem, H., and Raja, N. S. (2014). The impact of service quality on customer satisfaction, customer loyalty and brand image: Evidence from hotel industry of Pakistan. Middle-East Journal of Scientific Research, 19, 706-711.

• Shanka. M. S. (2013). Bank service quality, customer satisfaction and loyalty in Ethiopia banking sector, Journal of Business Administration and Management Sciences Research, 1,001-009.

• Solimun, S., and Fernandes, A. A. (2018). The mediation effect of customer satisfaction in the relationship between service quality, service orientation, and marketing mix strategy to customer loyalty. Journal of Management Development, 37, 76-87.

• Torres, E. N., and Kline, S. (2006). From satisfaction to delight: a model for the hotel industry. International Journal of Contemporary Hospitality Management, 18, 290-301.

• Zameer, H., Wang, Y., Yasmeen, H., and Ahmed, W. (2019). Modelling the role of service quality, customer satisfaction and customer loyalty in building service brand equity. International Journal of Asian Business Information Management, 10, 55-72.

• Zikmund, W. G., Junior, R. M., and Gilbert. F. W. (2003). Customer relationship management: Integrating marketing strategy and information technology. John Wiley and Sons.