

EFFECT OF CUSTOMER SATISFACTION ON CUSTOMER LOYALTY WITH THE MODERATION OF BRAND IMAGE

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Abstract. The study aims to understand the impact of service quality and price on customer satisfaction in the telecom industry. It also tries to analyse the moderating impact of brand image on customer satisfaction and customer loyalty among telecom customers. The study is based on telecom service providers in Central India. Previous studies have suggested that there exist linear as well as non-linear relations between brand image, level of satisfaction among customers and customer loyalty. This study tries to investigate the nonlinear relationship between customer loyalty and customer satisfaction among telecom customers based on the interactive effect of brand image. The result of the study is based on data gathered from 212 respondents of various telecom operators using hierarchical regression analysis method. Multiple Regression is used to test the relationship of service quality, price and customer satisfaction at the first stage. The moderating impact of brand image on customer satisfaction and customer loyalty is studied in the second stage using the hierarchical regression model. The results suggest that service quality and price perception have a significant impact on customer satisfaction. Brand image does not have a direct impact on customer loyalty but has a moderating effect on the relationship between customer satisfaction and customer loyalty.

Keywords - Brand Image, Service Quality, Customer Loyalty, Customer Satisfaction

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Introduction

Indian telecommunication sector has witnessed a major change due to technological advancement. As per reports of TRAI (2018), India ranks second in the world in terms of telecommunication subscribers. This has been achieved with government policy of increasing FDI in telecommunication from 74 percent to 100 percent in April 2000. The telecommunication sector is segmented into wireless, wireline and internet services.

There has been a vast technological change in wireless and internet services leading the Indian economy to upgrade from 3G to 4G technology. This has changed the usage pattern of telecommunication. Now, the telecom sector is not only used as a medium of communication, but also as a platform to be connected with the world. Usage of telecom services is not restricted only to making calls but to video calls, voice messages, social networking, online buying and selling and much more.

India has become the fastest-growing internet subscriber base in the world with increased usage of mobile applications. This has increased competition among telecom operators and made it difficult for them to retain their market share. Customer satisfaction helps in holding this market share. According to Zineldin (2000), satisfied customers will be loyal irrespective of price changes and will buy extra. But, change in technology has changed customer perception of basic service attributes leading to a change in the level of customer loyalty. Technological advancement leading to upgradation in service quality is attracting customers more than price sensitivity and the effect of brand image. In such a scenario keeping customers loyal in the telecom sector has become a difficult task. Thus the study tries to check the relationship between all these factors which can enhance customer loyalty.

Service Quality

Service quality is considered the necessary factor leading to customer satisfaction. Customer perception of the quality of services provided to them helps to improve satisfaction level and increase the level of loyalty. This also increases the economic benefits of service providers.

Thus it is necessary for service providers to offer improved services at a

minimum price to have a competitive advantage in the market (Lee et al., 2004). To measure service quality an instrument as SERVQUAL was developed by Zeithaml and Berry (1998). It has five dimensions to define service quality as tangibility (physical appearance), reliability (providing promised service accurately, responsiveness (helping customers promptly), assurance (conveying trust and confidence among customers) and empathy (caring and personalized attention to customers). Seth et al. (2008) used five dimensions of SERVQUAL with convenience and network quality as two additional dimensions to measure cellular service quality in the telecom sector in India. Previous studies suggest that cellular service quality is being measured in telecommunication taking in view video call, VAS, customer support services, price, compatibility with mobile devices, etc. (Kim, 2000; Gerpott et al., 2001).

Price

According to Bei and Chiao (2001), the price is the amount of money given up or sacrificed for getting a product or service. Kotler and Armstrong (2012) stated that price is the amount charged for receiving benefits from a product or services. Price is defined as something that can be measured using indicators like affordability, discounts, suitability, fairness of price and competitive price Kotler and Keller (2012).

Yi and Huiying (2008) suggested that perceived price plays an important role in behavioral intentions in china on MDS. The study by Kuo and Yen (2009) showed that consumer attitudes become more negative when 3G services cost become high. Sun and Hu (2009) stated that there is an impact of price to be paid by users of information services.

Brand Image

Brand Image is created by the perception that the customer has in his mind. It consists of beliefs, ideas and impressions about a particular brand. This brand image is formed by customer's interaction with a particular brand. It takes into consideration the experience and other interactions which may not include purchase or product usage. This brand image is used as an asset by companies as it helps develop customer loyalty and positive behavior of customers. Xuemei and Luiz (2011) studied the impact of brand image in explaining consumer behavior. According to Fung So et al. (2013), a strong brand image helps in improving the profitability and performance of the firm. Brand image can affect the way customers feel about a particular brand. The best way to get the

most benefit of the brand image is by aligning benefits of brand with the customer's personality and qualifications as suggested by Maroofi et al. (2012) in his study.

Customer Satisfaction

It is the level of utility derived from the use of products or services by a customer (Oyeniya, 2011). Satisfaction may be stated as a difference between what customer expected of usage of product or service and what he experienced.

Thus it is a comparative analysis of what customer experienced post usage and what he has expected before using a product or service. A previous study by Olotewo (2017), in the Nigerian telecom sector, suggests that customer satisfaction helps in holding existing customers and push them towards continuing the usage of products or services with existing telecom service providers. A study by Faullantet al. (2008) and Terblanche (2006) states that customer satisfaction is a predator of loyalty.

Customer Loyalty

Customer loyalty is the commitment of the customer to repurchase or reuse the product. It is the customer's preference for a product or service in a short or long run as suggested by Oliver (1999). Customer loyalty is necessary for growth and survival of any company. It is necessary to keep hold of existing customers and to catch the attention of new customers for ensuring good market share as stated by Kim et al. (2004). According to Rai and Medha (2013), customer's emotional attachment with brand along with customer satisfaction leads to customer loyalty. Thus, the customer is willing to pay a premium price for products or services. Previous studies in the telecom sector by Rahman (2014), Khan & Afsheen (2012) and Shah, Husnain and Shah (2018) have studied individual variables of service quality based on the SERVQUAL Scale and their impact on customer satisfaction and loyalty. Switching cost and price is also studied but in linear form. This study tries to investigate the impact of service quality, price, customer satisfaction and customer loyalty on non-linear form. The moderating impact of brand image is also studied on customer satisfaction and loyalty. Based on these studies, the following objectives are derived:

Objectives

- To study the relationship between service quality, price, brand image, customer satisfaction and customer loyalty.
- To analyse the moderating impact of brand image on customer satisfaction and customer loyalty link.

Hypotheses

H1: There is a significant impact of service quality and price on customer satisfaction in telecom sector in Central India.

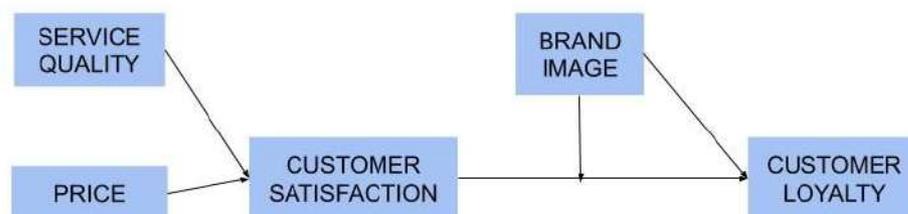
H2: There is a significant impact of customer satisfaction on customer loyalty in telecom sector in Central India.

H3: There is a significant impact of brand image on customer loyalty in telecom sector in Central India.

H4: There is a significant impact of brand image on customer satisfaction and customer loyalty link in telecom sector in Central India.

These proposed relationships are pictorially represented in the initial model of the study, refer Fig. 1.

Fig. 1. Initial model



Research Design

This study adopted a descriptive survey method. For the study, 212 customers are taken from the telecom sector that are using various telecom service providers in Central India. Convenience sampling method of non-probability sampling technique is used in the study for the period of September 2017 to October 2018. A pilot study of 60 respondents were carried out. Based on the inputs of the pilot study, the questionnaire was drafted on a likert scale of 1 to 5 with 1 (Strongly Agree) to 5 (Strongly Disagree). The questionnaire is based on attributes of service quality of telecom services, price, satisfaction of customers, brand image and customer loyalty and is used to collect data from respondents

of the telecom sector in Central India.

Data analysis

The data was analysed using SPSS 20. Multiple regression analysis is used to study the relationship between service quality (SQ) and price (PR) being dependent on customer satisfaction (CS) and the results are presented in Table 1. Similarly, moderating impact of brand image (BI) is analysed on Customer satisfaction (CS) and the level of customer loyalty (CL) and the results are presented in Table 2.

Table 1. Multiple regression analysis for Service Quality, Price and Customer Satisfaction

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.841 ^a	0.707	0.704	0.72611

a. Predictors: (Constant), SQ, PR

Anova

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	265.482	2	132.741	251.766	.000b
	Residual	110.193	209	0.527		
	Total	375.675	211			

a. Dependent Variable: CS

b. Predictors: (Constant), SQ, PR

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.415	0.422		0.984	0.326
	Service_Quality	0.54	0.048	0.56	11.337	0
	Price	0.406	0.056	0.361	7.316	0

a. Dependent Variable: CS

H1: There is a significant impact of service quality and price on

customer satisfaction in telecom sector in Central India.

In table 1, the value of adjusted R-square (.704) indicates 70.4 percent of variance of customer satisfaction which is explained by service quality and brand image. Table 3 shows that service quality and price is affecting customer satisfaction level of telecom customers. The beta value shows that service quality has 54 percent and price has 40.6 percent impact on customer satisfaction. Thus hypothesis 1 is accepted that there is a significant impact of service quality and price on customer satisfaction of telecom customers.

*Hierarchical Regression for Customer Satisfaction,
Customer Loyalty and Brand Image.*

For testing the direct impact of hypotheses 2 and 3, regression analysis was used. Hierarchical regression was used to check the moderating impact of brand image(BI) on customer loyalty(CL) and customer satisfaction(CS). Variables were centered to avoid multicollinearity.

Two models were used by applying hierarchical regression method:

Model 1 has customer satisfaction and brand image as independent variables. The dependent variable here is customer loyalty. The model was significant with p-value > .05 and showed 67.8 percent of variance.

Model 2 was based on the previous model. The independent variable included customer satisfaction, customer loyalty in centered form and a new variable was formed by multiplying customer satisfaction and brand loyalty in centered form as CS_BI to test the moderating impact.

Table 2. Hierarchical Regression for Customer Satisfaction,
Customer Loyalty and Brand Image.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.823a	0.678	0.675	0.99005
2	.845b	0.714	0.71	0.93529

a. Predictors: (Constant), : CS, BI

b. Predictors: (Constant), : CS, BI, CS_BI

a. Predictors: (Constant), CS, BI, CS_BI

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	430.591	2	215.296	219.645	.000b
	Residual	204.862	209	0.98		
	Total	635.453	211			
2	Regression	453.501	3	151.167	172.808	.000c
	Residual	181.952	208	0.875		
	Total	635.453	211			

- a. Dependent Variable: CL
- b. Predictors: (Constant), : CS, BI
- c. Predictors: (Constant), : CS, BI, CS_BI

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.633	0.33		7.974	0	2.633	0.33
	CS	0.812	0.05	0.76	16.274	0	0.812	0.05
	BI	0.083	0.036	0.107	2.296	0.023	0.083	0.036
2	(Constant)	3.928	0.402		9.78	0	3.928	0.402
	CS	0.578	0.066	0.542	8.82	0	0.578	0.066
	BI	0.093	0.048	0.12	1.912	0.057	0.093	0.048
	CS_BI	0.031	0.006	0.435	5.118	0	0.031	0.006

a. Dependent Variable: CL
 Model 2 showed that the value of R square increased from 67.8 percent to 71.4 percent, stating that CS_BI has a moderating impact on customer satisfaction and customer loyalty linkage. Thus this model is retained for testing of hypothesis.

Regression Equation: Direct and Moderating Impact.
Customer Loyalty = 3.928 + .578(CS) + .031(CS_BI)

H2: There is a significant impact of customer satisfaction on customer loyalty in telecom sector in Central India.

The result shows that the value of customer loyalty is significant at 0.578 (p-value 0.00>0.05). Thus hypothesis 2 is accepted. It suggests that the level of customer satisfaction of telecom customers has a significant impact on

customer loyalty. The results are in affirmation with the previous study by Rai and Medha (2013) where they stated that customer satisfaction plays an important role in the formation of customer loyalty.

H3: There is a significant impact of brand image on customer loyalty in telecom sector in Central India.

The result shows that unstandardized beta value for brand image is 0.093 with a p-value of 0.058 which is more than 0.05 significance level. Thus hypothesis 3 is rejected. It suggests that there is no direct impact of brand image on customer loyalty. These results are in line with previous research by Robinot and Giannelloni (2010) where they emphasized on other elements such as quality, comfort and value to enhance customer loyalty. Indian telecom sector is under tough competition where most of the brands are merging for their survival or are purchased by rival brands, so customers are more interested in other factors while purchasing services rather than giving importance to brands.

H4: There is no significant impact of brand image on customer satisfaction-customer loyalty link in telecom sector in Central India.

The result shows that the moderating impact of brand image (CS_BI) is significant with an unstandardized beta of 0.031 (p-value 0.00 > 0.05). Thus it implies that there is a moderating impact of brand image on customer satisfaction – customer loyalty link. Brand image alone is not able to enhance customer loyalty as stated in hypothesis 3. Customers who are satisfied with their brand experience will stay loyal to the brand. Thus brand image in its moderating role strengthens the relationship between the satisfaction level of customers and loyalty in the telecom sector.

Discussion

Service quality and price have a direct impact on customer satisfaction. Service quality is an important factor in the telecom sector. Telecom customers are willing to pay more price for better service quality. This is in alignment with the previous studies of Howat et al (2008), Zeithaml and Bitner (2000) & Amin et al. (2013). Customer satisfaction not only precedes customer loyalty but also has a positive impact on customer loyalty which has been in line with previous studies by Chiou and Shen (2006), Tong and Wong (2014) and Silvadas (2000).

The result of hierarchical regression shows that brand image alone cannot influence customer loyalty. But under the moderating impact, the loyalty of customers is strengthened by the level of customer satisfaction. This is inconsistent with the previous study by Robinot and Giannelloni (2010). In the telecom sector, it has become difficult for companies to survive. So the brand is considered by satisfied customers for reuse leading to customer loyalty.

Conclusion

The study aimed to identify the relationship between service quality and price on customer satisfaction. It also tried to study the impact of brand image in enhancing customer loyalty. Due to these technological upgradations telecom sector has shifted from 3G to 4G network. This has improved the quality of service which customers were getting previously. But, this has also led to the merging of bigger brands for their survival. Thus the impact of the existence of brand image was necessary for the study. So direct as well as moderating impact of brand image was the second objective for study. Four hypotheses were put for the study. The result of the study concluded that service quality and price paid by customers have a strong impact on the satisfaction level of customers. Customer satisfaction was identified as an important factor for customer loyalty. Brand image does not have a direct impact on customer loyalty, but it adds on with customer satisfaction to make customers more loyal.

Based on the above conclusion, service providers of telecom sector are recommended to improve their service quality at a reasonable price. Better network quality which can reduce call drop and improve customer satisfaction is suggested. High Downloading speed, video calling, customer care service all are part of service quality which can enhance the level of satisfaction of customers. Brand image can be improved by using advertising. Marketing strategies for first-time users could be made so that they can have a trial of services. Service improvement has been recommended in the study.

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