Customer Satisfaction Affects the Customer Loyalty: Evidence from Telecommunication Sector in Pakistan

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Abstract: The aim of the study is to reveal the relation between customer satisfaction and customer loyalty in telecommunication sector of Pakistan. Government took dramatic and drastic steps to make this industry a larger player in the economy. Low prices and high service quality made the industry grow at alarming rate. The qualitative research was conducted from 104 professionals of Pakistan, with a questionnaire and factor analysis was further used to confirm the analysis.

Keywords: Customer loyalty, customer satisfaction, price, service quality, telecommunication industry

INTRODUCTION

The major objective of the research is to uncover the relationship between satisfaction and customer loyalty in telecommunication sector in Pakistan. Due to accessible communication, the world has become a global village. After a long time, countries came to know about the importance of telecommunication industry and its usage in social and economic sectors. In 1947, Pakistan inherited 14,000 land lines but now there are over 94 million cellular phone subscribers. The telecommunication sector within Pakistan is growing at the high growth rate from the past few years. Telecommunication sector is developing speedily and wireless communication capabilities are emerging across the globe. Government took dramatic and drastic steps to make this industry a larger player in the economy, now telecommunication services are being used in all the social and economic sectors. Two major growth areas in telecommunication sector over the past two years in Pakistan-mobile and broadband. Literature review was conducted to find out the relationship between service quality, customer satisfaction and customer loyalty. Review of literature confirms the relationship. The research was conducted with the objective to understand the desires and wants of the customers in selection of cellular service providers. What the customer wants from the cellular service providers. Desires and wants vary from customer to customer in respect of coverage, quality service, call tariffs, different service packages and customer care. The study conducted also shows quality coverage and price are also influencing factor in selection of the cellular service provider. The easy availability of product and service made a compelling customer mind in selection of cellular service provider.

The objective of the telecommunication industry is to satisfy its customers because the satisfied customer will be loyal and definitely use the service rapidity and suggests to others too. But satisfying the customer needs a high quality and huge efforts and struggle. The assumptions are made by people that cellular service providers should increase value added services to increase the customer satisfaction. The growing industry has also attracted the researchers to do their explore work in telecommunication industry focusing on how companies can maintain their existing customers. But still there are few other areas around Pakistan where landline and mobile services are not yet available. The long term survival of the service organization depends on the quality of service that they are providing to their customers. In this way they want to retain their customers to come back and buy back their offerings. 5-dimensions are used to quantify service quality: tangibles, empathy, assurance, responsiveness and reliability. Government of Pakistan made some relaxation in the policies that inspired the foreign and domestic companies to enter in this industry. Entrance of new companies gave great advantage to subscribers in form of lower call charges and quality service. The entrance of the new companies made an effective competition among major existing cellular companies. Companies are working hard to introduce more ingenious and cutting-edge services to appeal the customers. The common use of mobile phone technology is clearly seen across all walks of life in Pakistan.

Growth time period of cellular industry in Pakistan was almost five years (2003-2008), which broke all global, record i.e., quality services, good network coverage to numbers of subscribers. Pakistan’s has greeted and appreciated low price, easy available, quick and inexpensive channel of communication. In open market in
Pakistan, the cellular service providers are fighting on service quality and price both. They are also trying to fulfill the customer needs, want and desires in context of price and service quality. Organizations are always aiming and determined to continual success. For continuous benefits and returns, organizations are always trying to satisfy their customers in order to get them back for future repurchase. Organizations struggle a lot to retain its customers intentions in future repurchase. One of the necessary determinants of customer repurchase intentions is offering low prices, value added services, the best quality service to customers. All cellular organizations are offering the matchless accessible service to their customers in order to get them back for future repurchase.

Due to lowest call tariffs, wide coverage and good quality the Pakistan mobile service provider companies rapid growth during 2007. Service industry all around the globe is dependent upon satisfaction of customers because by satisfying the customer we can have a loyal customer, who can came back to re-purchase the product and service and also can recommend the company’s product and services to others too. The cellular service provider of Pakistan has been enduring 100% sustainable, viable growth rate for some years now.

There are five cellular companies operating in Pakistan: Mobilink, Ufone, Telenor, Warid and Zong. All of these cellular companies are offering the best possible service to their customers in order to make them a loyal customer and create a positive impact in their minds (Table 1).

<table>
<thead>
<tr>
<th>Names of the companies</th>
<th>No. of subscribers (in millions)</th>
<th>Market share (in %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobilink</td>
<td>32.1</td>
<td>31</td>
</tr>
<tr>
<td>Ufone</td>
<td>20.4</td>
<td>20</td>
</tr>
<tr>
<td>Telenor</td>
<td>25.1</td>
<td>24</td>
</tr>
<tr>
<td>Warid</td>
<td>17.6</td>
<td>17</td>
</tr>
<tr>
<td>Zong</td>
<td>8.9</td>
<td>8</td>
</tr>
</tbody>
</table>

The companies are providing best products and services giving more than the subscriber expectation to make them a loyal customer of their brands. All organizations are offering and providing the best of the best possible service to their customers to have their future repurchase intension. Studies recommend that there is a direct relationship between service quality and the customer satisfaction (Ahmed, 2010). The companies are competing to raise their market share have to grasp their customers. Cellular companies are consistently aiming advance and changed angel and approach to capture the market share. Customers has immense number of expectations from its cellular service provider, if the organization failed to meet the expectation of the customer the customer will switch to other cellular service provider. The customer wants and desires vary from customer to customer and also vary from time to time as per needs and conditions too. The company’s success depends upon on customer services that it is providing better than its competitors. The objective of the cellular organization is to value its customers wants and desires except of giving high incentives to its employees and returns to shareholders. To achieve higher level success of service quality in cellular organizations, organizations should provide higher levels of service. Due to massive competition among 5 cellular service providers, mobile phone has become affordable for every common man. As a result providing good quality service by the organization gives back the customer a determination and eagerness to remain using the same service provider connection is satisfaction. Customer satisfaction is the result of what customer’s perceive of the product and services. To make and measure the customer satisfied organizations spend extraordinary resources. Sometimes most of the organizations considered customer satisfaction as a main objective of marketing department. Customer satisfaction is affected by elements like: price (tariff), call quality, SMS packages and network coverage and network availability. Cellular companies of Pakistan are providing lowest call rates and SMS packages to attract the remaining people of the society not having the mobile by exciting offers and rates. Quality is perceived through usage of product and services and overall experience overall experience. Most necessary agent or a part of customer repurchase aim discussed by researchers is providing the best quality product and service customers. Low tariffs rates, best coverage and high quality service is making the cellular market of Pakistan to grow at an alarming rate. Due to this much high growth rate in this sector Pakistani market has to face so much challenges. Within a high competitive market, organizations have to work a lot to maintain their customers by improving the services and maintain the quality what they are claiming. Customer satisfaction is considered important cause of repetitive sales and loyal customer and positive words-of-mouth. If a customer is satisfied it will come back to buy more and give the good image of the brand to others by his own experience.

Enlarging customer’s desires for competitive and economical, attainable and efficient communication modes has resulted in extraordinary expansion of cellular phone industry around the world particularly in Pakistan. Service quality includes factors like: reasonable and various price tariffs, call connectivity, voice clarity and better network coverage to make the customer satisfied in telecommunication industry. Quality service has major effect on satisfaction of customer, but satisfaction of customer has no effect on consumer purchase intention. Overall feelings that create the customer satisfied and a certain attachment to a product and service is customer loyalty. Organizations are always planning for having endless success and achievements, for having this much of success the organizations are continuously satisfying their customer in order to make them satisfied loyal
customers. Providing the quality products and services to satisfy the customer is considered as a key point and is has a positive effect on the customer is said to be the key factor in satisfying customers and it has a direct effect on the customer repurchase understanding in future. There is a direct and positive relationship between service quality and the satisfaction of customers (Ahmed et al., 2010).

LITERATURE REVIEW

Variables in this article are: Customer satisfaction, Customer loyalty, Service quality and Price (Tariff). Customer satisfaction is considered as an independent variable, whereas service quality and price are the determinants of customer satisfaction. Customer loyalty is considered as dependent variable. Aggregately, four variables are considered for analysis, out of which one is independent and one is dependent and rest two are the determinants/attributes of independent variable.

Determinant of customer satisfaction that is price and service quality were selected from the studies conducted by Ali et al. (2010).

Telecom service industry: Service industry is dependent on customer satisfaction. First stage is to attract customer and the final achievement/aim/goal is to have a loyal customer; but trust is the element involved between satisfaction and loyalty. The major goal of service industry is the satisfaction of its customers because the satisfaction is involved in returning back of customers (Khokhar et al., 2011). It is obvious that if there is trust then one is prone to purchase something meaning that one is reluctant to buy products or take advantages of services if customer is fully satisfied or trust relationship is there between organization and customers itself. It is very important for telecom sector to look beyond price wars in order to keep their customers satisfied and loyal (John, 2011).


In this article variables are discussed one by one and then their relationship is also explained:

Independent variables:

Service quality: Quality is described as the comparison between customer’s expectations and performance. Service quality includes comfort, variety in packages, friendliness provided by service providers of telecom sector to their customers. They further discussed that it is the quality of service that influences the customer to remain to one organization in the long run. Service quality is the link that customers make between their expectations and their perception. Quality is what customer perceives as everyone have different way to perceive things. Service quality is to meet the specifications. By specifications we mean meeting up of the criteria the customer want and fulfilling their demands. Service quality is simply what the users/customers say it is, whether it is right or wrong (Maiyaki et al., 2011). They also elaborated that it is not necessary that customers purchase the highest quality service; they may also look for comfort, price and customer’s personal experience. All these factors contribute for customer satisfaction.

Determinants of service quality: Goods are tangible and their measurement is based on performance, features and durability. Service is intangible and can be measured on perception. The determinants are explained below:

- **Reliability:** The ability to perform the promised service accurately.
- **Responsiveness:** The willingness to help customers to react positively.
- **Assurance:** Ability to convey trust and confidence to customers.
- **Empathy:** The caring, attention given to customers.
- **Tangibles:** The presence of facilities, equipment, personnel and communication materials (Maiyaki et al., 2011).

Findings suggest that reliability do not have any significant relationship with customer satisfaction, while there is a significant relationship of assurance, empathy and responsiveness with customer satisfaction. Service quality is basically regarded as the impression given by the customers to the service provider for creating sense of superiority and inferiority (Ahmed et al., 2010).

Price: Price is one of the factors that cause the customers to attract or repel (Butt, 2011). Price is the medium of exchange with which we get worth, that can either in tangibles (goods) or intangibles (service) (Butt, 2011). A customer is reluctant to pay less in order to have satisfaction so in other words we can say that low price is directly related to high degree of satisfaction and high quality is associated with higher customer satisfaction. Satisfied customer would have more price tolerance (Ali et al., 2010 a, b). Customer’s decision to buy services/products depends on two things that is the quality offered and the price of the service provided (Ahmed et al., 2010). The customer must be positive and must be willing to pay the price and it should be according to the customer’s expectations of quality (Garrette and Karnani, 2010).
Customer satisfaction: Customer satisfaction is the degree of repeated buying of a product. Customer satisfaction creates value for customers, in short managing their expectations and to fulfill their needs (Guzzo, 2010). Customer satisfaction is defined as meeting one’s criteria or satisfying one’s expectations or we can say that a satisfied customer has a particular feeling or attitude towards a service or product it has used Maiyaki et al. (2011). They further explained Customer satisfaction is one of the major goals of marketing activity/marketers whereby it serves as a link between what customer buy and how they behave. It is obvious that if someone is satisfied with particular offering or product they will get themselves involve in repeated buying.

Customer satisfaction is associated with the customers that how they perceive the quality (Ali et al., 2010). Customer satisfaction has positive influence on financial performance of organizations. When the service provided by Telecom Company satisfies the customer they tend to increase their usage and level of purchase. Customer satisfaction act as a mediator between service quality and customers repurchase intentions. In order to obtain long term relationships and long term benefits it is essential for organization to continuously satisfy the customers so that they remain to the same organization and stick to it in long run and continue repurchase. Customer repurchase dependent on the quality of service or products being offered to the customer (Ahmed et al., 2010). Satisfaction is an important determinant which effect the other variables and Company’s economic progress. Satisfaction comes after utilization of some product or service which is basically the outcome of actual and expected functions of product (Khokhar et al., 2011). It is very critical for any organization to identify and satisfy needs of customer that would help them in retention of customers. Major goal of the marketing process is customer Satisfaction. As competition is increasing day by day, more and more companies strive for high quality in their products and service; with a view to eventually succeed in satisfying their customers. Success of any organization depends on the fact that they understand the needs of customer and satisfy them in good manner.

Since every customer have different need, different buying patterns, different behaviors, different satisfaction levels, different attitudes and feelings, therefore it is not necessary that every customer get same level of satisfaction from particular products or services being offered. For this purpose it is mandatory to have clear idea about what customer want and what will give him maximum satisfaction (Maiyaki et al., 2011). More the satisfaction of customer more will be the loyalty of customer towards organization and more will be the survival of business. There is a strong relationship between marketing and management department (Ahmed et al., 2010).

Dependent variable: Customer loyalty: Customer loyalty is the feelings that compel the customer to repurchase a product, service or brand (John, 2011). Customer loyalty can be achieved by identifying the customer needs, managing them and fulfill them Maiyaki et al. (2011). Companies can develop a loyal customer by offering superior value, excellent services and quality products. Customer loyalty is actually considered as a combination of customers’ favorable attitudes and their purchase behaviors. Consumer satisfaction and consumer loyalty both are considered as a tool to develop and attain sustainable competitive advantage (Ali et al., 2010). Loyal customers can be divided into two main branches that are Satisfied Customers and Un-Satisfied Customers. A strong relationship exists between loyal and satisfied customer. Sometimes un-satisfied customers are loyal because of their commitment with supplier. Satisfied customers, on the other if lack the commitment with the supplier; will always divert once a competitor with better services is identified. This is false loyalty, due to which the customer feels hurdles in way, which stops him to choose another supplier. These hurdles are called switching costs. Customer loyalty is basically the customer’s attitude towards a company which compels him to buy again and again the product/service of that particular company and referring of that product/service by the customer to his friends, family members and others. To create and maintain customer loyalty is becoming an integral part in service based industry (Khokhar et al., 2011). The customers are said to be loyal if they buy repeatedly and they also refer to others and stick with the organization and its products/services for long run. Some advantages of customer loyalty are new customer service cost is more than old customers. Old customers are ready to pay even high price for particular products. A loyal customer act as a source of success for a company as it act as a agent for company’s marketing (Siddiqi, 2010). Profitability of any organization/company is dependent on its number of loyal customers as they remain with the organization and are involve in repeatedly buying (Khokhar et al., 2011). Customer loyalty is increased by various factors like network quality, customer service and obviously value added services increasing loyalty, ensures organization’s growth, so marketing strategy should be designed in a way that they will be able to retain the existing customers (John, 2011) providing good quality, best services obviously will help in increased loyalty of customers and in the end is a source of organization’s success. It is very costly to create new customers whereas on other hand it is very easy and cheap to maintain existing customers. In case of service industry in order to create loyal customers, reliability factor is very important and play a strong role and have strong influence on minds of customers (Khokhar et al., 2011). Customer satisfaction is a major attribute in order to have retention of customers in long run which would lead obviously to loyal customers (Ali et al., 2010).
Loyalty of customer is responsible for profitability and growth of an organization, is positive for company because it involves continuous purchase of a service/product for a longer time period (Khokhar et al., 2011). If the customer is loyal to the organization, it will stick to the same organization in long run and this help in creating source for organization’s success. Basically trust is an element that is responsible for creating loyalty as one party belief that whatever the second party will do is favorable and in their best interest then obviously trust will become strong and ultimately satisfaction will increase and loyalty will also be enhanced. Customer loyalty is interrelated to the continued existence of organization. It is the important criteria that companies need to develop if they want to mature (John, 2011).

**Relationship of service quality and customer satisfaction:** A direct relationship exists between service quality and satisfaction of customer. It has been suggested that improved service quality will result in a satisfied customer. Quality is an attribute on which satisfaction is based (Maiyaki et al., 2011). They further elaborated that quality basically relates to delivery of the service and it is a managerial activity whereas satisfaction reflects customers’ experiences with that service. The outcome of better service quality is which enable the customers to stay with the service provider (Ahmed et al., 2010).

**Relationship of price with customer satisfaction:** Service quality is not the only parameter of consumer satisfaction, other aspects are: Price, complaints, expectation about the product and value addition of the product (Ali et al., 2010). High expectations are linked with high prices. If the price is higher than the customers satisfaction is negatively affected (Butt, 2011).

**Relationship of customer satisfaction with customer loyalty:** There is a positive direct, relationship between product/service quality, consumer satisfaction and customer loyalty (Ali et al., 2010). Higher customer satisfaction is directly related in maintaining a loyal customer. The factor that link customer satisfaction and customer loyalty is the service quality (Siddiqi, 2010). More loyalty is there when the customer is satisfied whereas if dissatisfactions occurs than customer moves to some other organization.

**Relationship of customer loyalty with service quality:** Customer loyalty is dependent on the quality of service being offered (Ahmed et al., 2010). Higher the quality of service more the satisfied customer will be and greater will be the service quality. So we can say that there exists a direct relationship between quality and customer loyalty.

**Relationship of customer loyalty with price:** Lower the price the more will be the satisfaction level and consequently more will be the customer loyalty (Ali et al., 2010). It is evident from researches that price have great impact on satisfaction level of customer. Customer will be greatly attracted towards low price.

**Interrelationship between three independent variables:** There is a deep and strong interrelationship between the independent variable, as identified there are three independent variables: Service quality, Price, Customer satisfaction. These variables can help in improving services and this will help organization to gain competitive advantage (Siddiqi, 2010).

**Relationship between independent and dependent variable:** It is now evident from different studies that greater the quality and affordable price more will be the satisfied customer and ultimately more will be the loyal customers which help organization to attain success.

**Theoretical frame work:** Broad range of variables can be used to identify and measure the Customer Loyalty. For example: Customer Satisfaction, Service Quality and Price.

**Hypothesis:**

- **H<sub>1</sub>** : High degree of service quality will lead to higher customer satisfaction
- **H<sub>2</sub>** : Low price (tariff) will lead to higher customer satisfaction
**Table 2: Variables and measurement**

Descriptive statistics

<table>
<thead>
<tr>
<th></th>
<th>N Statistic</th>
<th>Min Statistic</th>
<th>Max Statistic</th>
<th>Mean Statistic</th>
<th>Std. Error Statistic</th>
<th>Std. Deviation Statistic</th>
</tr>
</thead>
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<tr>
<td>Gender</td>
<td>104</td>
<td>1.00</td>
<td>2.00</td>
<td>1.3654</td>
<td>0.04745</td>
<td>0.48387</td>
</tr>
<tr>
<td>Age</td>
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<td>74.00</td>
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<td>1.17905</td>
<td>12.02398</td>
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<tr>
<td>Qualification</td>
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<td>5.00</td>
<td>3.8654</td>
<td>0.08205</td>
<td>0.83675</td>
</tr>
<tr>
<td>Type of organization</td>
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<td>2.00</td>
<td>1.3846</td>
<td>0.04794</td>
<td>0.48886</td>
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<tr>
<td>Managerial position</td>
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<td>3.00</td>
<td>2.0865</td>
<td>0.05133</td>
<td>0.52344</td>
</tr>
<tr>
<td>Currently employed here from</td>
<td>104</td>
<td>1.00</td>
<td>35.00</td>
<td>7.8269</td>
<td>0.85741</td>
<td>8.74387</td>
</tr>
<tr>
<td>Currently using cellular network</td>
<td>104</td>
<td>1.00</td>
<td>5.00</td>
<td>2.3846</td>
<td>0.12620</td>
<td>1.28704</td>
</tr>
<tr>
<td>Using this connection</td>
<td>104</td>
<td>1.00</td>
<td>15.00</td>
<td>5.5385</td>
<td>0.26174</td>
<td>2.66922</td>
</tr>
<tr>
<td>Monthly spending</td>
<td>104</td>
<td>200.00</td>
<td>6500.00</td>
<td>1689.9423</td>
<td>151.32591</td>
<td>1543.22756</td>
</tr>
<tr>
<td>Valid N (list wise)</td>
<td>104</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**H3:** High degree of quality will lead to more loyal customers

**H4:** Low price will lead to more loyal customers

**H5:** Higher the degree of customer satisfaction higher will be the loyalty of customers

Service quality would lead towards more loyal and satisfied customer. Customer satisfaction helps to develop perception of high quality (Ali et al., 2010). Satisfaction level is high when minimum price is paid by the customer and maximum profit is attained (Afsar et al., 2010). Studies suggest that a positive relationship exist between service quality and customers satisfaction (Ahmed et al., 2010). High customer satisfaction is very important in maintaining a loyal customer base (Siddiqi, 2010).

**Study design:** In the cross sectional correlation field study, data on 3 independent variables and 1 dependent variable were collected from various professional individuals belonging to different industrial sector.

**Data collection:** The population for the study comprised all the individuals of Pakistan using cell phones. Through a simple random sampling procedure data was collected from all the professionals using cell phones. Total sample size was 150 and responses were received from 104 professionals. The response rate was about 69.33%. The unit of analysis was the individuals who responded to the survey.

The age of the respondents ranged from 18 to 74. The Average age was about 34 and the employee’s average qualification is holding master degree. The average numbers of respondents were belonging from the private sector at middle management position. The average years of being currently employed are 8 years and majority of the respondents were using Mobilink from approximately 6 years. The average monthly spending is 1689 Rupees. Whereas minimum usage is of Rs. 200 and maximum is Rs. 6500.

All demographics variables such as gender, age, qualification, type of organization, position in the organization, currently employed here from, connection using, since when, using monthly expenditure on current network, were tapped by direct single questions (Table 2).

**Table 3: Reliability of variables**

<table>
<thead>
<tr>
<th>Scale</th>
<th>Cronbach’s alpha</th>
<th>No. of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer satisfaction</td>
<td>0.715</td>
<td>2</td>
</tr>
<tr>
<td>Service quality</td>
<td>0.886</td>
<td>4</td>
</tr>
<tr>
<td>Customer loyalty</td>
<td>0.747</td>
<td>3</td>
</tr>
<tr>
<td>Price</td>
<td>0.849</td>
<td>2</td>
</tr>
</tbody>
</table>

**Customer satisfaction:** We have performed factor analysis from which factors 1 and 4 is removed to enhance reliability. This independent variable indicates the extent to which an individual are expected to be satisfied of the current network (Kumar et al., 1992). Developed four items to measure this variable, a sample item being: I frequently do complain about the connection to my dealer. Cronbach’s alpha for the four items for this sample is 0.715 (Table 3).

**Service quality:** This independent variable was measured using (Parasuraman et al., 1986) four item measures. An example item is: they should provide their services at the time they promise to do so. Cronbach’s alpha for the measure for this sample is 0.886 (Table 3).

**Price:** We have performed factor analysis from which factors 13 and 14 is removed to enhance reliability. This independent variable was measured using (Gaski and Etzel, 1985) four item measures. An example item is: most packages offered are overpriced. Cronbach’s alpha for the measure for this sample is 0.849 (Table 3).

**Customer loyalty:** We have performed factor analysis from which factors 8 is removed to enhance reliability. This dependent variable indicated the loyalty of customers towards the network (Manolis Keep et al., 1994) developed four items to measure this variable. An example item is: I go the same network each time I need. Cronbach’s alpha for the measure for this sample is 0.747.

**RESEARCH FINDING**

**Data analysis and results:** After determining the reliabilities in Table 3, correlation analysis of variables (Cronbach’s alpha for the measure for this sample), frequency distributions for the demographic variables were obtained. These may be seen in Table 2. Then
Table 4: Correlations analysis of variables

<table>
<thead>
<tr>
<th></th>
<th>Customer_satisfaction</th>
<th>Service_quality</th>
<th>Price</th>
<th>Customer_loyalty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson correlation</td>
<td>1</td>
<td>0.307**</td>
<td>0.439**</td>
<td>0.327**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>0.002</td>
<td>0.000</td>
<td>0.001</td>
</tr>
<tr>
<td>N</td>
<td>104</td>
<td>104</td>
<td>104</td>
<td>104</td>
</tr>
<tr>
<td>Service_quality</td>
<td>0.307**</td>
<td>1</td>
<td>0.257**</td>
<td>0.519**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.002</td>
<td></td>
<td>0.008</td>
<td></td>
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<tr>
<td>N</td>
<td>104</td>
<td>104</td>
<td>104</td>
<td>104</td>
</tr>
<tr>
<td>Price</td>
<td>0.439**</td>
<td>0.257**</td>
<td>1</td>
<td>0.283**</td>
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<tr>
<td>Sig. (2-tailed)</td>
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<td>N</td>
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<tr>
<td>Customer_loyalty</td>
<td>0.327**</td>
<td>0.519**</td>
<td>0.283**</td>
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<td>Sig. (2-tailed)</td>
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<tr>
<td>N</td>
<td>104</td>
<td>104</td>
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</tr>
</tbody>
</table>

**: Correlation is significant at the 0.01 level (2-tailed)

Pearson correlation matrix was obtained for the 3 independent and 1 dependent variable. It is to be noted that no correlation exceeded 0.5 (Table 4). Each hypothesis was then tested. The correlation matrix provided the answer to the five hypotheses. The first hypothesis stated that high degree of service quality will lead to higher customer satisfaction. The correlation of 0.307 (p<0.002) between the two variables substantiates this hypothesis. We accept the second hypothesis stated that lower the price higher will be the customer satisfaction, because a positive correlation of 0.439 (p<0.000) between the two variables substantiates this hypothesis. Table 4 indicates a positive relation of the third hypothesis that higher degree of quality will lead to customer loyalty. The correlation of 0.519 (p<0.000) substantiates this hypothesis as well. That is greater the quality of the network, more will be the loyal customers. The fourth hypothesis indicated that low price is directly related to loyal customers. The correlation of 0.283 (p<0.004) substantiates this hypothesis as well, so it is accepted. The positive correlation of 0.327 (p<0.001) substantiates about the fifth hypothesis stated that higher the degree of customer satisfaction, higher will be the loyalty of customers.

Results verify the research model Figure: 1 that high degree of service quality will lead to higher customer satisfaction and more loyal customers. This develops a perception in customers mind that they are getting high quality and attaining maximum profit by paying low price for a better telecommunication service.

**Regression:** R^2 value of this analysis is 0.309 at the significance level of p<0.000 shown in Table 5, with df (3), shown in ANOVA in regression Table 6, confirms that 30.9% of the variance customer loyalty in telecommunication explained the three independent variables: customer satisfaction, service quality and price (tariff). The coefficients of regression in Table 7 gave us the reflection of unstandardized and standardized coefficients of constants: customer satisfaction, service quality and price depending on customer loyalty (dependent variable).

Table 5: Model summary of regression

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R^2</th>
<th>Adjusted R^2</th>
<th>SEE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.556</td>
<td>0.309</td>
<td>0.288</td>
<td>1.336</td>
</tr>
</tbody>
</table>

**Research model:**

Equations for stepwise regression analysis:

- Y = α + β (x1) + e
- Y = α + β (x2) + e
- Y = α + β (x3) + e

where X1 = CS = customer satisfaction; X2 = SQ = service quality; X3 = P = price; Y = CL = customer loyalty

**CONCLUSION AND RECOMMENDATION**

Research suggests that telecom sector needs to implement latest technology, provide friendly services in order to satisfy the existing customer and to attract the new customers as well. These findings are consistent with (Khokhar et al., 2011) proving that service quality, affordable prices and satisfaction of customer will ultimately lead to a loyal customer. Future research
can be conducted on people belonging to different sectors as everyone nowadays uses the services of telecommunication.

REFERENCES


