

Pakistani Customer Satisfaction Index

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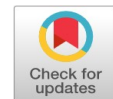
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Abstract: The modern economy and its dynamics are changing rapidly. The core feature of old economy was mass production and consumption of commodities. However the new economy is more advance and is focused on producing more differentiated goods and services. Research suggests that no CSI model can be generalized for all sorts of economies and organizations. That's why it has been in evolutionary phase since it was first introduced. In Pakistan, like most Asian countries, customer satisfaction has never been measured. As satisfaction level brings us to know the real benefits that masses are getting from govt. and customer from private sector organizations. The respondents were approached with questionnaire that contained 18 questions and 4 demographic variables. Wordings have been modified where needed to make it understandable with regard to mobile phone services. This research has ample justification on the validity of cause and effect model proven through correlation and regression analysis. Customer satisfaction model has been validated in local context with strong reliability.

Keywords: Modern economy, Dynamics, Production, Consumer, Goods and services

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INTRODUCTION

Background of the study

The modern economy and its dynamics are changing rapidly. The core feature of old economy was mass production and consumption of commodities. However the new economy is more advance and is focused on producing more differentiated goods and services. Mass production has been an omen for healthy economy for centuries however today it is not an indicator of financial health and improvement of economy (Fornell, Johnson, Anderson, Cha, & Bryant, 1996). Hence measurement of quality has got more attention due its importance in the advanced economy and consumer literacy trends. Customer Satisfaction (CS) measurement is the best way to gauge the performance of the economy as well as the business organizations (Taiwan, Na-Nan, & Ngudgratoke, 2017; Zeithaml, Berry, & Parasuraman, 1996).

Customer satisfaction is the most important consideration of all sorts of organizations (for profit and non for profit) in this competitive and dynamic era. The benefits of customer satisfaction are key to success for every organization. Customer satisfaction urges the customer to repurchase, say word of mouth and develop other associations with the brand. It has been proved that companies focus on customer satisfaction to increase profitability. Customer satisfaction has got ever highest importance as customers, being paramount driver for the loyalty and profitability of the organization, are getting aware of their importance. To increase the customer satisfaction and devise future strategies, the customer satisfaction is being measured in many developed countries.

A lot of research has been conducted to measure customer satisfaction and ways it can be enhanced. Measurement of customer satisfaction is so important that without its help organizations can't improve satisfaction level of their customers. In U.S customer satisfaction is measured for almost all the services provided by the Government. In Sweden Govt. arranges to measure satisfaction level for the customers of different services (Fornell & Wernerfelt, 1988; Rafiah & Ariyanti, 2017). The classic work on customer

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satisfaction was first initiated by Fornell and his colleagues. Fornell's model of customer satisfaction measurement is used to develop American customer satisfaction index. Swedish scholars have also used identical model with bit enhancement, there version is called SCSB. Results from these researches help in developing a quality benchmark for each sector. Thus help to evaluate performance of sector and individual operators on the basis of satisfaction index. Customer satisfaction index also depicts the well-being and socio economic welfare of the nation it is measured for. Welfare states like Scandinavians are having highest score on customer satisfaction index. This is evident of their plight on socio- economic fronts.

Unfortunately, customer satisfaction has never been priority for developing or underdeveloped nations. Thus no measurement and improvement of customer satisfaction has been carried out yet. Measurement of customer satisfaction for different services, whether provided by private sector or under the government's directive, will enable to know the perception of masses using different services and products. Consequently, companies and Govt. can take initiative to address the customer concerns, shown through lower satisfaction as measured by the customer satisfaction index.

Problem statement

Research suggests that no CSI model can be generalized for all sorts of economies and organizations. That's why it has been in evolutionary phase since it was first introduced. Major economies have modified and tested it as a scale of CS measurement. This study is intended to bridge the gap by developing a scale for Pakistan to measure CS and develop a national index. The study also examines the impact of Brand Image contribution to CS construct which was missing in ACSI.

Justification and gap analysis

In Pakistan, like most Asian countries, customer satisfaction has never been measured. As satisfaction level brings us to know the real benefits that masses are getting from govt. and customer from private sector organizations. Customer satisfaction has been measured in America using American Customer Satisfaction Index (ACSI) in Sweden using Swedish Barometer of Customer Satisfaction (SBCS) and Norway has also developed their scale to measure customer satisfaction. However ACSI has limitations and it can't fit in all sorts of organizations and cultural settings. Therefore, ACSI cannot completely explain the key factors contributing towards customer satisfaction and their relative importance.

This study bridges the gap by validating the CS scale in Pakistan as no reliable scale, up to my knowledge best, has yet been introduced to measure CS in subcontinent. This study also includes another construct Brand Image into the measurement model which has not been used by most of the CS models. Since recent studies show that brand Image has a very positive impact on CS and perception hence brand image becomes a critical and relevant factor that may possibly affect customer satisfaction. This study, therefore, includes brand image in CS model.

Significance of the study

The current study provides us with Customer satisfaction Index for cellular sector of Pakistan which is the first subjective index to measure satisfaction. No such research has been carried out in Pakistan and no index has been developed on the basis of that to this date. The research help us to know about the quality of services customers are getting from their service provider or product manufacturers (Grigoroudis & Siskos, 2004; Layyinaturobanayah, Masyita, & Sekartadje, 2016). The research enables private sector organizations to improve their services for their most important stake holders (customers).

This study reduces the gap in literature in many ways. The research also facilitate in adaptation, improvement and learning process towards CSI methodology. The model in this paper is based on ACSI and ECSI (European Customer Satisfaction Index).

Objectives of the study

1. To develop Customer Satisfaction Index of Pakistan (PCSI) for telecom industry.
2. To measure the impact of customer satisfaction on Customer Loyalty.

3. To measure the impact of customer satisfaction on customer complaints .
4. To test the causal model and its authenticity in local context.

Research questions

1. What is the impact of service quality, customer expectation, brand image, and perceived value on customer satisfaction?
2. What is the impact of Customer Satisfaction on Customer Loyalty?
3. What is the impact of Customer Satisfaction on Customer Complaints?

LITERATURE REVIEW

Customer satisfaction

Jacoby and Chestnut (1978) defined customer satisfaction as “the buyer’s cognitive state of being adequately or inadequately rewarded for the sacrifices he has undergone”. Satisfaction is the mental condition of human mind (Barsky & Nash, 2002). It is revealed in early studies that customer satisfaction more definitive outcome of post purchase decision (Cardozo, 1965). The customer is firm’s most fundamental source of revenue generation. Customer satisfaction is output of good product quality and valuable marketing efforts.

Purpose of customer satisfaction: The purpose for increasing customer satisfaction is to create long term profitable relationship with the customers (Malthouse, Oakley, Calder, & Iacobucci, 2004). The cost of attracting new customer is higher than the cost of retaining current customer because low growth and high competitive markets are increasingly common characteristics of many industries (Fornell & Wernerfelt, 1987).

Customer satisfaction plays an important and fundamental role in achieving customer loyalty and profitability. Increase in customer satisfaction is positively associated with the profitability of the organization (E. W. Anderson & Mittal, 2000). Moreover, customer satisfaction is essential to the long-term success of a firm as it drives future customer loyalty and profitability (Zeithaml, 2000). Both the actual product and the associated services determine overall satisfaction with the consumption experience.

Impact of customer satisfaction: A basic characteristic of marketing is that consumer satisfaction with a product or a service leads to repeat purchase, adaptation of new products/service in same product/service line and favorable word of mouth for that brand. High consumer satisfaction leads to greater customer loyalty (E. W. Anderson & Sullivan, 1993). This, in turn, leads to future revenue (Bolton, 1998; Fornell et al., 1996).

Customer expectations

Customer expectation is one of the basic antecedents of CS. Customer expectation is defined as what customer predicts. These expectations are argued to positively affect customer satisfaction because they serve as cognitive anchor in the evaluation process (Oliver & DeSarbo, 1988). Customer expectations are the customer-defined attributes of any firm’s product or service it must meet or exceed to achieve customer satisfaction. Satisfaction causes quality expectation, brand image and service quality whereas dissatisfaction results in increased complaints decreased loyalty (Grigoroudis & Siskos, 2004). Assimilation theory reveals a strong relationship between customer expectation and customer satisfaction (R. E. Anderson, 1973). User expectations have different impact on formation of customer satisfaction according to the situation Ignacio. Customer expectation includes customer previous experience with the product and future likelihood of its performance (Fornell et al., 1996). Disconfirmation model explains if perceived performance is higher than expectation, customer will be more satisfied, however, if performance is lower than expectation customer will be dissatisfied. Consumer expectation, mainly, is based on three factors, first it is the consumers previous experience or service encounter with the product, second it’s the word of mouth about the goodness and quality of service and thirdly its company’s external marketing communication as this too have a vital role in decision process for reburying of the product (Boulding, Kalra, Staelin, & Zeithaml, 1993). Disconfirmation paradigm refers expectations as reference point for evaluation of current consumption experience (Oliver Richard, 1997).

Perceived value

Service quality is determined by matching service level with customer expectation. If the service level stays higher than customer expectation, service quality will be higher and if service level remains low than what customer expects then there will be poor service quality. [Fornell et al. \(1996\)](#) argue that inclusion of both perceived quality and perceived value into the ACSI model provides more diagnostic information. As the impact of value increases relative to quality, price is more valuable determinant of satisfaction. As quality is component of value, the model directly links quality with value.

Equity means what is fair and impartial in exchange with perceived cost of the product or offering. Customer analyses that whatever he or she has got for the sacrifices or value is worth it or not ([Bolton & Lemon, 1999](#)). Customer perceived value is based on the evaluation of rewards versus cost of sacrifices he or she has under gone for a product or set of services. Customer wants to be rated equally as compare to the company. They want their benefit should be equal to that of the company. They desire that what they achieve must not be less than what the companies achieve from the transaction ([Oliver, 1999](#)).

Brand/company image

Brand image is defined as overall perception about some brand based on the past experience ([Davidow, 2000](#)). Consumer behavior toward a specific brand is highly influenced by the brand image and how will it matches the self-images of target customers. According to [Aaker and Equity \(1991\)](#) perception is based on the image that perception might be on the basis of experience or information. Company image leaves everlasting memories got through good experience. American customer satisfaction model did not include company image and its relationship with customer satisfaction and customer loyalty. As it has been substantiated that company image forms perception and it being a type of attitude it also creates price in elasticity.

In ECSI model there are indirect relationship between brand image and perceived value. In this model, customer expectations, product quality and perceived value play their role as antecedents to customer satisfaction. While perceived value is positively associated with customer satisfaction is a well approved construct. Company image is positively associated with customer satisfaction and customer expectations ([Coelho & Esteves, 2007](#)) company impact of company image can be analyzed on perceived value.

Service quality

[Parasuraman, Zeithaml, and Berry \(1985\)](#) first discussed the construct in a comparative manner and they argued that service quality is the difference between customer expectations and perceived level of performance of an offering. To further explain this concept [Parasuraman et al. \(1985\)](#) developed the SERVQUAL model (Scale) consisting of 5 dimensions as tangible, responsiveness, assurance, reliability and responsiveness. The scale has been widely validated in academia and industry.

SERVQUAL has been under discussion for long and various modifications and alternatives have been proposed. [Cronin Jr and Taylor \(1992\)](#) argued that SERVPERF should be incorporated in service quality scale to better understand and measure customer perceived service quality.

Customer loyalty

[Fornell and Wernerfelt \(1988\)](#) argued in customer satisfaction model that both word of mouth and repurchase intention are the most important factors for customer loyalty. Loyal customer is the principal driver of profits. Along with continuing to stay with at a brand's properties, satisfied customer also refer new business. Companies with satisfied loyal customers enjoy higher margins and consequently greater profits than the business that cannot retain and satisfy their customers. In health care sector the relationship between customer loyalty and satisfaction has been proven ([Cydulka, Tamayo-Sarver, Gage, & Bagnoli, 2011](#)). Customer loyalty has been taken as an outcome of customer satisfaction.

Customer complaints

Customer complaint is the consequence of customer dissatisfaction. Complaints provide manager with an opportunity to take corrective action and fix the problem or shortcoming in the product or service quality. This has also been proved that customer who complains the failure of service is somewhat less satisfied but he or she may repurchase the product or service. Zero complaint may not be financially feasible to achieve, company should go for an optimal level of higher satisfaction level and lower level of complaints.

The causes for customer complaints are common and widespread. According to various surveys and researches almost 20% of customers are dissatisfied and show their discontentment somehow or the other. Various reasons for complaints has been quoted for different types of product, in a study of durable products it has been revealed that major reason of complaints was inferior quality of material used (Day & Ash, 1979). Nevertheless, this only remains useful in case of durable manufacturing while in case of services and intangible offerings the reasons are different.

Unique characteristics of the services expose itself to higher number of requirements which leads to displeasure and then complaint. Unique characteristics include intangibility, perishability and heterogeneity. Another very complex feature is their inseparability, which makes it very difficult to separate the process of production and consumption during a service encounter. All the dimensions discussed earlier are core to the concept but above all is the concept of intangibility (Parasuraman, Zeithaml, & Berry, 1988) which differentiate between physical product and services, and thus it plays a vital role in services marketing (Lovelock, 1991).

Customer expectation and customer satisfaction

Customer expectation means what would happen during upcoming imminent transaction. This is sort of predisposition based on various indicators (Parasuraman et al., 1988). R. E. Anderson (1973) argue that expectation is the prediction of future consequences based on prior experience, current atmosphere and external stimulators. Not only academicians but managers since long trying to understand the influence of customer satisfaction with the help of understanding influence of expectations. Customer expectation is widely discussed concept in marketing. A lot has been written on its impact and management to reap utmost benefits out of it. Although various studies have suggested various results depending on the nature of product and industry, one thing is clear that result cannot be generalized across all sorts of products or services.

In various models of retail banking services focus has been on two approaches. One is a comparative judgment of expectation and second was perceived performance resulting in output of perceived service quality and Customer satisfaction. Both of the concepts have been frequently measured and found correct in various settings (Lewis & Mitchell, 1990). However these types are well debated area of marketing research. A lot of research on the conceptualization has been written (De Ruyter, Bloemer, & Peeters, 1997). Both form of judgments are comparative in nature thus emanates a comparable paradigm for the formation of expectations. In banking sector customer develop perceptions before service encounter then they compare the perception to the expectation.

Expectation should have a direct and strong influence on customer satisfaction for being so important anchor in satisfaction evaluation process (Oliver & DeSarbo, 1988). Expectation contains all the information about a products previous encounter and current behavior this information works as anchor and keep itself adjusted with every new transaction (Tversky & Kahneman, 1974). Services for their characteristics of intangibility render themselves to more strong relationship between customer expectation and customer satisfaction. Consequently, on the basis of above arguments, I develop the following hypothesis.

H1: Customer expectation is positively associated with Customer Satisfaction (CS).

Perceived value/customer satisfaction

The relationship between customer perceived value and customer satisfaction has been under discussion since long. And perceived value has been considered as the most important antecedents of

customer satisfaction. Perceived value plays primary role in determining customer satisfaction once the product or service encounter takes place. In retail store research (Donald, William, et al., 1994). It has been discovered that perceived value positively influences customer satisfaction. Customer satisfaction has been defined and positive or negative sentiment of net value of product consumed or services used. In supplier-buyer relationship context Woodruff (1997) argues that perceived value is customer's cognitive harmony of relational transaction with the supplier, while customer satisfaction is an overall feeling originates from perceived value.

Business activity happening on the planet Lin and Wang (2006) has substantiated the hypothesis that perceived value have positive influence on customer satisfaction. In addition to it various researchers have concluded the same findings. Therefore, on the basis of above evidence, I develop the following hypothesis.

H2: Perceived value is positively associated with customer satisfaction.

Brand image/customer satisfaction

Brand image is the perception of the brand developed from general information and previous consumption experience. Brand image is considered as a complete picture about a brand based on certain beliefs (Fornell & Wernerfelt, 1987).

In today's cutthroat competition products and products are becoming harder to differentiate on the basis of quality and prices. Alternatives are so minutely copied and sleekly offered that no one can differentiate on the basis of quality and cost. The only thing through a customer can differentiate and prefer one product to the other in the market is brand. Only thing that cannot be copied and provide an edge is brand. Therefore it is imperative for companies to develop strong brand strategy for their products and services. On the importance of brand image various authors have argued strong brands can cultivate higher satisfaction and customer loyalty.

According to E. W. Anderson and Mittal (2000) people engage in cognitive process to build their perception of the company. Corporate image carries same characteristics as of human characteristics. Corporate image inspire purchase from specific company without considering service quality and other characteristics. In this way corporate image becomes an issue of attitude and belief (Aaker & Equity, 1991). This has also been discussed that corporate image creates halo effect on customer satisfaction. This is taken as positive contribution and characteristics of corporate image which significantly affect customer attitude of being satisfied with the product or service.

The most appropriate to endorse a brand is to purchase it and use it and if it is not out of reach. This is the more preferable mechanism to show effect and power of image. Firms with higher service quality have very strong standing to benefit from the reputation and goodwill of the brand. Hence, on the basis of above evidence, I develop the following hypothesis.

H3: Company image is positively associated with customer satisfaction.

Service quality/customer satisfaction

Services quality is highly debated and researched topic in marketing literature. Service Quality construct is a perceived attitude developed over a long time. This is very basic and generic evaluation of the services (Bolton, 1998). Service quality represents the difference between customer's expectation and actual performance. Higher service quality level or lower expectations level both can lead to higher level of perceived service quality.

Research in marketing domains has shown that the key to corporate success and competitive edge is improvement in perceived value, service quality and customer satisfaction simultaneously. Firms with lower service quality encounter more service failure experience for customers as compare to the companies with higher level of service quality. Service failure experience directly approach customer satisfaction level and convert it into dissatisfied customers most of the time.

According to Woodruff (1997) the core competency and competitive advantage lies in the delivery of higher quality service that translates into satisfaction of customers. In this way, organizations which provide superior services will reap more satisfied customer base which will further translate into higher

economic returns (Bolton, 1998; Fornell et al., 1996).

It has been widely discussed that to form the judgment of satisfaction it is mandatory to have an experience of actual usage of the product or service (Bloemer, De Ruyter, & Wetzels, 1999). There is ample evidence that service quality is determined by limited antecedent (Oliver, 1999). However, there is thorough consensus on sequential order of service quality and satisfaction in the marketing literature. Service quality is considered as super ordinate construct while satisfaction is subordinate construct and is determined by service quality (Rust & Oliver, 1993). Cronin Jr, Brady, and Hult (2000) carried out an empirical investigation to find out the relationship between of both of these construct. Using SEM structural equation modeling they found that service quality works as a determinant of customer satisfaction.

Based on previous studies and findings it may be hypothesized that service quality and customer satisfaction are positively associated.

H4: Service Quality is positively associated with Customer Satisfaction.

Consequences of customer satisfaction

Customer satisfaction/customer loyalty: Oliver Richard (1997) express loyalty as strong commitment to rebury and patronize a product or service. He further says this commitment must not be affected by any external communication factor or influence. Customer loyalty doesn't allow any marketing offer to causing customers switching to other offerings. Oliver (1999) introduced 4 stage loyalty. Loyalty contains mutual benefits for both company and customers. Loyal customers get more benefit, superior value and special handling as compare to new customers (F. Reichheld & Teal, 1996). Furthermore, loyal customers are integral to company's survival and growth in cut throat competition. The core objective of marketing activity is to develop and retain loyal customers. This can reap more benefit for the company in long-run than various initiatives taken to maximize gain from sale of product or service (Dick & Basu, 1994).

Customer satisfaction has been considered the core objective to be achieved for the success of a product or service. According to Donald et al. (1994) Exit Voice theory if a person is dissatisfied with the offering of company he or she will speak up and switch to the competitor. Customer loyalty is operationalized on two dimensions. 1. Intention to leave. 2. Recommendations to others. According to Donald et al. (1994) theory, customer dissatisfaction will cause switching intention and unfavorable word of mouth. The immediate consequence of increased customer satisfaction is increased customer loyalty (Fornell & Wernerfelt, 1987).

Customer satisfaction enhances customer's willingness to repurchase and positive recommendations to others about the offering. A satisfied customer will opt for repurchase with more volume and frequency, therefore the higher satisfaction will effect positive behavior intention (F. Reichheld & Teal, 1996). Boulding et al. (1993) emphasized the use of two dimensions. 1. Repurchase intention and 2. Word of mouth for measuring customer loyalty and post purchase intention. Repurchase intention is the process of purchasing product or service again and again from some company. The reason of repurchase is post purchase experience and satisfaction from previously used items (Hellier, Geursen, Carr, & Rickard, 2003).

If the customer is satisfied with the product or services of the company he or she becomes willing to spend more and more money with existing company. His satisfaction then converts into very conspicuous behaviors of spending money and showing loyalty through purchasing from the same company again and again (Bolton & Lemon, 1999; F. Reichheld & Teal, 1996; F. F. Reichheld & Sasser, 1990). In contrast, all the dissatisfied customer may not approach to the service provider directly and may switch to competitor (Day & Ash, 1979).

In pure services domain, satisfied customers avails more services than a less satisfied customers. They have greater intentions to repurchase and say word of mouth to acquaintances regarding the value and benefits of the services (Zeithaml et al., 1996). Score of studies have shown that customer satisfaction has positive effect on customer loyalty (Bloemer et al., 1999; Oliver, 1999; Zeithaml et al., 1996). This hypothesis has also been tested and verified in E-commerce domain (F. F. Reichheld & Sasser, 1990).

Research to find out crucial antecedents of customer loyalty has been under discussion by academicians and practitioners since long. Scholars have attempted to unleash prominent antecedents of loyalty.

Numerous studies have argued that most effective way of generating customer loyalty is to delight and satisfy customers (Oliver, 1999).

Customer satisfaction is vital ingredient in the efforts of achieving customer loyalty and profitability (Barsky & Nash, 2002). Numerous researches have investigated the relationship between customer satisfaction and customer loyalty through empirical methods. Researcher have found a categorical relationship between both of these constructs. Empirical data has proven that customer loyalty is positively influenced by customer satisfaction (Bitner, 1990). Higher customer satisfaction should increase customer loyalty, reduce transaction cost and the cost of attracting new customer (E. W. Anderson & Sullivan, 1993). Customer satisfaction is positively associated with repurchase intention and positive word of mouth. Hence, based on the above discussion, I develop the following hypothesis.

H5: Customer satisfaction is positively associated with Customer loyalty .

Customer satisfaction/customer complaint

It was Fornell who first carried the flag and initiated the research for customer satisfaction measurement. It was he who first discussed the consumer dissatisfaction and its impact on customer complaint and repurchase Behavior (Fornell et al., 1996). He argued in the favor of complaints if they can be solved and recovered. He suggested that complaint may provide an opportunity to convert dissatisfied customer into satisfied customer with successful service recovery. Customer complaints behavior can be defined as an action or set of action taken by a dissatisfied customer. Oliver Richard (1997) defines customer complaining behavior as a post-failure reaction generated by customer dissatisfaction. Day and Ash (1979) has also argued that complaint is an action triggered through dissatisfaction.

A lot has been investigated about the nature of the relationship between customer satisfaction and customer complaint. However most of the research in this domain has suggested that with an increase in customer satisfaction there may not be an equal decrease in customer complaint behavior. Rather it will take some time to be effective. It may take some time till it shows the decrease in complaints. Thus a non-linear relationship in B-to-C setting has been established by various authors.

Cydulka et al. (2011) investigated the relationship between customer satisfaction levels and the frequency of complaints. The research was performed in longitudinal setting to measure the increasing satisfaction level and its impact on frequency of complaints. The purpose was to study the impact of increased satisfaction on number of complaints. As discussed earlier services are more prone towards complaints due to their nature, mistakes happen very often and sometime in front of customer himself. Therefore firm's primary focus should be on customer satisfaction and in case of some complaint, should cultivate skills for successful recovery. In earlier studies of customer satisfaction measurement a negative correlation between customer satisfaction and customer complaints materialized (Fornell et al., 1996). This emanates that a company with higher satisfaction level will have lower number of complaints and more customer loyalty (Fornell & Wernerfelt, 1987).

Although research in this domain still lack to the extent that it can decide a categorical relationship between customer satisfaction and customer complaint. Marketing researchers are not confident about the relationship about satisfaction level and number of complaints is simple negative linear relationship across various satisfaction levels or relationships are asymptotic and changes at various levels. The entire dissatisfied customer may not approachable to the service provider directly and may switch to competitor (Day & Ash, 1979).

Barsky and Nash (2002) presented a model through which a dissatisfied customer behaves after being annoyed and dissatisfied by current service provider or supplier. According to this model a dissatisfied customer exits (quit the relationship) or raises voice (complain against the happening) and try to re-establish the relationship with the current service provide. According to Barsky and Nash (2002), a dissatisfied customer complaints the company about the product or service failure. If the complaint is solved the customer make repurchase and stay with the same company. If not the customer would switch to competitors brand.

H6: Customer satisfaction is negatively associated with customer complaints.

RESEARCH METHODOLOGY

Model

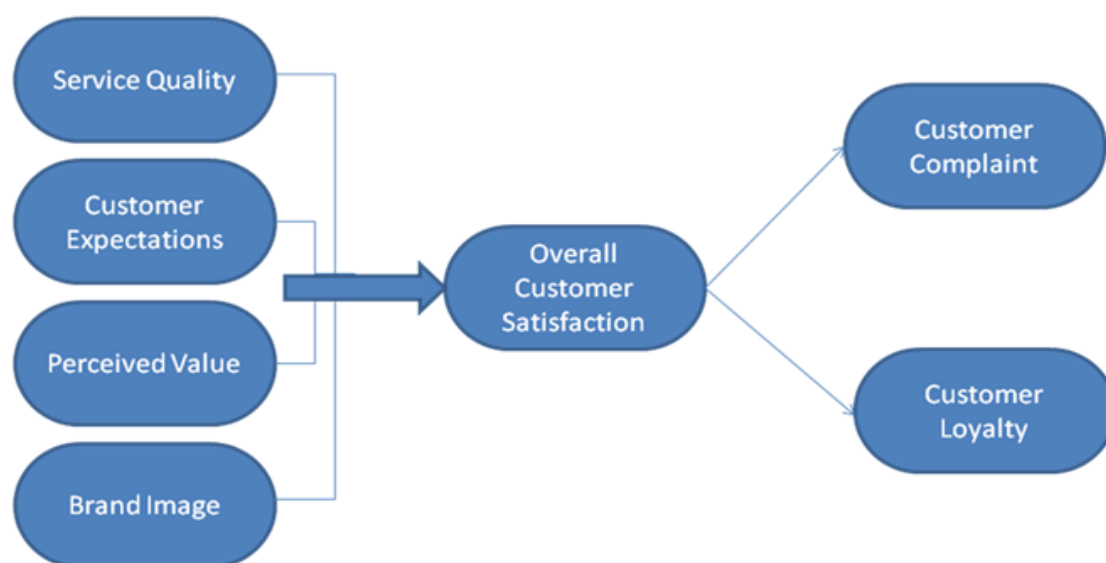


Figure 1. Integrated customer satisfaction measurement model

Methodology

Model variables are categorized into three main categories for analysis.

- Satisfaction Causes (antecedents).
- Satisfaction.
- Satisfaction outcomes (Complaints and loyalty).

Figure 1 depicts the model of customer satisfaction which has been used to measure customer satisfaction in the development of PCSI. Study has included telecom sectors. All the construct of the model has been measured through multiple dimensions.

The respondents were approached with questionnaire that contained 18 questions and 4 demographic variables. Wordings have been modified where needed to make it understandable with regard to mobile phone services. Measurement variables are given below.

Another method of measuring customer satisfaction impact is the use of disconfirmation paradigm, A few researchers have measured the customer satisfaction through disconfirmation paradigm (Rust & Oliver, 1993). In customer satisfaction literature, cumulative experience has widely been accepted as customer satisfaction measurement method. Customer satisfaction has been measured using two item scales. The measure has earlier been used in mobile phone services (Lin & Wang, 2006).The usage of multiple indicators for single construct reduces the data skewness (Fornell & Wernerfelt, 1988). Two item scale of customer satisfaction has been adapted from Oliver and DeSarbo (1988). 1. How overall you are satisfied with the service of the company. 2. Overall, how satisfied are you with your mobile communication company? Same scale has been used by various researchers to measure customer satisfaction.

Each variable was measured using multiple latent variables to gauge the exact impact and level on satisfaction index. Customer expectations were measured using three items by focusing on customer expectation of service quality based on knowledge and previous experience. Three measures included:

1. Overall Expectations
2. Expectations regarding customization
3. Expectations about reliability of service
4. What were your overall expectations of the quality of this mobile service?
5. What were your expectations of the extent to which these mobile services would meet your personal requirements?

6. What were your expectations of the reliability of these mobile services?

Perceived Value is exchange between what customer receives in form of value and benefits versus the sacrifices he or she undergoes like price, opportunity cost and efforts etc (Cronin Jr et al., 2000). Two measures for perceived value have been used 1. Overall, the service you receive from this company is valuable 2. The service quality you receive from this company is worth your money and efforts. The same scale has been used by Cronin Jr and Taylor (1992) for measurement of Perceived Value in mobile phone services.

As discussed earlier in the literature about the construct of service quality performance based measures has widely been used to measure the dependent variable (Parasuraman et al., 1985). Service Quality has been operationalized using SERVPERF model because of suitability and better fit of the performance based measures model (Boulding et al., 1993). Service quality measurement has been considered actual experience of the service and three items has been used to tap the actual perceived performance quality of the service. 1. Overall service quality 2. Customizations 3. Reliability (Fornell & Wernerfelt, 1988). Service quality is comparative judgment of what customer expected before the consumption and what he has discovered in reality.

The usage of multiple indicators for single construct reduces the data skewness (Fornell & Wernerfelt, 1988). Image has been measured using 4 item scales developed by Fornell et al. (1996). The scale includes 1. Company's Reputation 2. Company's Prestige 3. Reputation of company's services 4. Reputation of the company as compare to competitors.

To measure the impact of customer satisfaction on customer loyalty two measures have been recommended. This includes the two dimension of loyalty construct, 1. Re purchase intention 2. Positive word of mouth. Because both of these dimension exhibit customers likelihood and intention to continue the relationship with current service provider. That's why both of these core expression of consumer loyalty (E. W. Anderson & Mittal, 2000) with (Cronbach Alpha .876). Complaints have been measured using 2 measures from . 1 frequency of lodging complaints 2. Recovery from complaints.

Sample and data collection

Survey has been used as data collection method with the questionnaire as instrument of data collection. Population of the study comprises of all customers/users of the product/service. Top five competitors from cellular phone industry were included in the study whose customer were questioned on the basis of equality. Convenience sampling technique were used to collect data. It was cross sectional study .A sample size of 250 has been used for each sector. Sample is based on the methodology of European Customer Satisfaction Index (ECSI). To remove the halo effects in measurement of satisfaction, three measures have been taken 1. Measuring attribute satisfaction immediately after consumption. 2. Using relative rating scale. 3. Increase the number of attributes to be measured (Coelho & Esteves, 2007).

RESULTS

Descriptive statistics and correlation

Table 1 shows descriptive statistics and includes means and standard deviation. It also includes inter correlation among all the variables included in this study. Total respondents include 37% of male respondents and 56% female respondents. The respondents were from different age groups starting form 18 years up to 40 years. The average age was 27 years. Sample comprises of various income groups participation on per annum basis. 67% of the total respondents were having income below than 200,000 PKR per year. 15% were having income between 200,000-400,000, 10% were having income between 400,000-800,000 and 1% had income more than 800,000 per annum. 43% of the respondents were undergraduate, 55% were graduate and only 2% had postgraduate degrees.

Reliabilities have been given in parenthesis in Table-1 along with correlations statistics. The reliabilities for all the variables have met the standard criterion of being above than 7. Reliability for customer expectation was .79, perceived value was .74, brand image .89, service quality .85, customer satisfaction .93, and customer loyalty .75 respectively. The correlation results in Table 1 depict that customer expectation is positively and significant correlated ($r = .22, p < 0.01$). Table 1 reveals that relationship is positively

correlated ($r = .51, p < 0.01$). Table 1 depicted that brand image and customer satisfaction are positive related. Service Quality and customer satisfaction has been found highly correlated ($r = .51, p < .01$). Customer satisfaction has been found positively correlated with customer loyalty($r = .60, p < .01$) and customer satisfaction and customer complaint is negatively correlated ($r = -.25, p < .01$).

Table 1: Descriptive statistics

	Mean	S.D	1	2	3	4	5	6	7	8	9	10
1.Age	23.30	4.7										
2.Gender	1.60	.49	.23**	–								
3.Education	1.61	.60	.24**	-.18*	–							
4.Imcome	1.40	.79	.22**	-.16*	.23**	–						
5. Expecta- tion	6.82	1.42	.17*	-.02	.09	.031	(.79)					
6.Perceived Value	6.37	1.74	.12	-.01	-.03	.028	.37**	(.74)				
7.Brand Image	6.85	1.48	-.12	.13	.04	-.055	.31**	.49**	(.89)			
8.Service Qual- ity	6.47	1.61	.00	-.01	.05	-.027	.40**	.62**	.56**	(.85)		
9.Customer Satisfaction	6.41	1.80	-.08	.07	-.06	-.059	.22**	.51**	.61**	.60**	(.93)	
10.Customer Loyalty	5.67	2.58	.14	.16*	.05	-.092	.28**	.45**	.49**	.45**	.59**	(.75)
11.Complaint	5.26	3.01	.12	-.19**	.09	.017	-.09	-.04	-.08	-.19**	-.25**	-.18*

$N = 203$, Cronbach Alpha is given in parenthesis , for Gender 1 is Male, 2 is Female; for Education 1 for Graduate, 2 for Maters , 3 for Higher Studies and 4 for post Doctorate; For Income 1 is 0-200,000, 2 is for 200,000 to 400,000, 3 is for 400,000 to 800,000 and 4 is above 800,000.

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

* Correlation is significant at the 0.05 level (2-tailed).

Regression results

I examined the independent role of customer expectation, perceived value, and brand image and service quality on determining customer satisfaction. I also tested the role of customer satisfaction on determining customer loyalty and customer complaint. Table 2 depicts the regression analysis results for customer expectation, perceived value, brand image and service quality. Demographic variables were used in step 1 as control variables. Contrary to the most of previous literature it was found that customer expectation does not determine customer satisfaction. The regression results showed that effect of customer expectation on customer satisfaction was insignificant ($\beta = -.07, n.s$). While regression result for perceived value significantly and positively predicts customer satisfaction ($\beta = .18, p < .05$). Brand image has been proved the most powerful and significant determinant of customer satisfaction ($\beta = .36, p .01$). In addition, Service quality also had a highly significant and positive impact on customer satisfaction ($\beta = .30, p < .01$).

Table 3 shows regression analysis results for customer satisfaction with customer loyalty and customer complaint. I hypothesized that customer satisfaction has positive influence on customer loyalty and negative influence on customer complaint. Regression results has proved that customer satisfaction has highly significant and positive relationship with customer loyalty ($\beta = .57, p < .001$) and highly significant but negative relationship with customer complaint ($\beta = -.26, p < .001$) at $R = .09$.

Table 2: Regression results for customer satisfaction

Variables	Customer Satisfaction		
	β	R^2	ΔR^2
Step 1:			
Age	-.058		
Income	.049		
Gender	-.038		
Step 2:			
Customer Expectation	-.07	.456	.436
Perceived value	.175*	.456	.436
Brand Image	.356**	.456	.436
Service Quality	.301**	.456	.436

Note. $N = 203 = * p < .05$ ** $p < .01$ *** $p < .001$

Table 3: Regression results for customer loyalty and customer complaint

Variables	Customer Loyalty			Customer Complaint		
	β	R^2	ΔR^2	β	R^2	ΔR^2
Step 1:						
Age	.208**			.084		
Income	-.109			-.030		
Gender	.188*			-.179*		
Step 2:						
Customer Satisfaction	.571***	.392	.379	-.257***	.109	.090

Note. $N = 203 = * p < .05$ ** $p < .01$ *** $p < .001$

DISCUSSION

This research has ample justification on the validity of cause and effect model proven through correlation and regression analysis. Customer satisfaction model has been validated in local context with strong reliability. In table 1 correlation has been proven for all the independent and dependant variables except customer expectation and customer satisfaction. The relationship is not significant between customer expectation and customer satisfaction. Study proposed that customer expectation and customer satisfaction positively correlate consistent with various previously conducted researches and all the customer satisfaction index models (Bitner, 1990).

There was another stream of researchers who has talked about insignificance of this relationship. They have argued that customer expectations have no direct impact on customer satisfaction rather it works as evaluative judgment. Their model view customer expectation with relation to disconfirmation paradigm, in this way expectation is evaluated with performance and not related directly to customer satisfaction. Service quality has very significant impact on customer satisfaction and service quality has been proven the most important contributor towards the CSI model consistent with Fornell (Oliver & DeSarbo, 1988). Perceived Value has been proposed by various scholars as alternative to customer satisfaction and in our findings it has rightfully supported the hypotheses. Higher perceived value causes overall higher customer satisfaction. Brand Image first time has been used in this model and in local context it has been validated and the relationship proven positively significant with customer satisfaction. Cause and effect model has been validated in local context and all finding are consistent with previously held research.

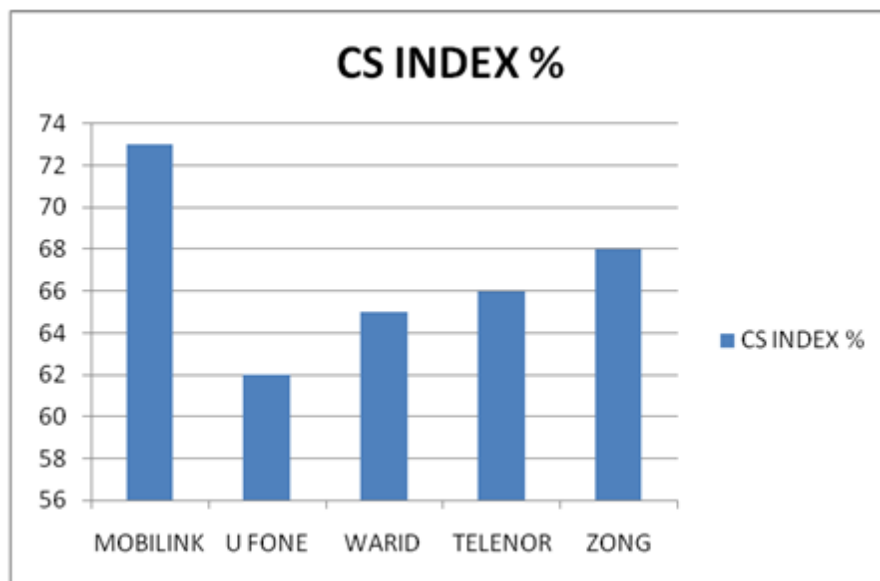


Figure 2. CS index

Customer satisfaction index figure given in diagram 2, Shows the overall satisfaction level of Pakistani customers of telecom operators. Five Telecom firms have been included in the study for satisfaction measurement. Mobilink has highest index for customer satisfaction at 73% of index value, U Fone 62%, Warid 65%, Telenor 66%, Zong 68%. Ufone has lowest customer satisfaction amongst all other in the industry. Detailed variable inquiry can be useful to sort out the reason for lower satisfaction at Ufone. This score would bring forth Telecom firms the strengths and weaknesses of their services, capitalizing on strengths and overcoming the weaknesses, telecom firms would earn more revenues and in turn will provide better services to their valuable customers.

In Figure 2 there is a customer satisfaction comparison for Prepaid and Postpaid telecom services. Postpaid customers are more satisfied than prepaid customers by significant margin. Postpaid customers satisfaction index is 69% and Prepaid is 65%. The results second the notion of more you pay better u get. Post paid customers are more viable for the organization as they contribute more yield than that of prepaid customers.

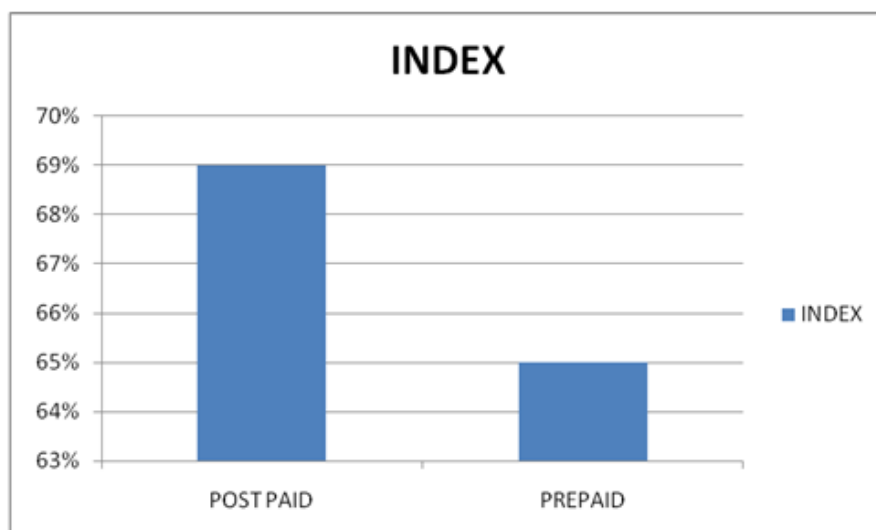


Figure 3. Index

Practical implications

The research is very beneficial for practitioner and managers working in any sector of the economy especially services sector. Management of expectation has been differently perceived by practitioners and marketing managers before the finding of our research. Much focus put to the construct of expectation which has nothing to do with customer satisfaction in Pakistani context. Brand image has been under discussion since long and its role as predictor to customer satisfaction was less tested and under research area. Brand image proved very strong predictor of CS; this can help managers to take advantage of the construct to enhance customer satisfaction for long term profitability. Brand image may well be enhanced to turn over the lower level of satisfaction into higher level of satisfaction. This model renders itself as the most appropriate tool for measuring customer satisfaction index. This model and scale would work as ready made tool for marketing and research managers for all local institutes and organizations.

Limitations and future research

Research was conducted as part of educational fulfillment, and inherited the capacity of being at limited scale. Customer satisfaction index was limited to only one industry due to financial and time constraint. In future more sectors may be included for measuring the index. It would be better if manufacturing and financial sectors included for future research. More sectors for measuring the national index would strengthen the reliability and validity of scale. Govt. should take initiative to conduct it at national level for measuring it annually for whole economy.

This standardization would help consumer plight if consistent efforts are made to measure and enhance customer satisfaction.

CONCLUSION

Despite limitations, the study reaps far reaching impact for industry and academia. This not only adds to the existing pool of knowledge but also portray the plight of standardized and efficient service delivery to the masses. This in turn would help the organizations and Government to take corrective measures for improved service delivery. Customer satisfaction model has been validated in Pakistan which is one of the greatest achievements of this undertaking. Customer Expectation has no significant impact on customer satisfaction, can prove a vital strategy making tool in the discipline of marketing strategy and management.

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