

*Full Length Research Paper*

# Determinants of consumer retention in cellular industry of Pakistan

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Cellular industry of Pakistan has grown many folds in recent years. Many new entrants have also joined the market to reap the potentials of this growing industry. This situation has originated a hyper competition among major cellular service providers in Pakistan. Companies are working hard to introduce more innovative and eye-catching products to attract customers. The companies with large consumer base are striving to reduce their switching costs. However the main concerns of the cellular service providers is to retain the existing customers. This research is designed to find out the determinants of consumer retention in cellular industry of Pakistan. This is an exploratory study based on primary data which was collected from University students of Pakistan. The study found user friendliness, price reasonability and call clarity as strongest determinants of consumer retention in cellular industry of Pakistan. Although the findings of this study are specific to cellular industry in Pakistan, these may be generalized to any other market passing through transitional phase of rapid growth and characterized by low paying capacity of customers.

**Key words:** Customer satisfaction, consumer retention, switching cost, cellular industry, Pakistan.

## INTRODUCTION

Cellular industry of Pakistan is growing at a high annual growth rate. This tremendous growth has attracted many national and international cellular services providers. Cellular companies battling for supremacy and profits have started to focus on consumer retention than on acquisition. The growth rate shows that number of subscribers have increased from 68,000 in 1996 to 3.3 million by the end of 2003; since then the subscriber base has heaved to reach 80 million in early 2007 and exceeded 95 million in 2009 (PTA). The tremendous growth in Telecom industry is still a vacant room to be penetrated. The telecom sector has finally started to make progress despite of all belated regulations. This will

change the trends in this emerging market. Cellular growth time period in Pakistan which lasted for almost five years (2003 - 2008), broke almost all global record from network coverage to number of subscriber. Pakistanis have welcomed and enjoyed these cheap, quick, better and inexpensive ways of communication over older landline-based infrastructure. As Valdecantos (2009) noted, the mobile telephone market of Pakistan has been experiencing 100% sustainable growth rate for some years now.

This growing industry has not only attracted the business community, but also academic researchers. Numbers of studies have been conducted in cellular industry in different countries, ranging from engineering to marketing aspects of cellular services industry. Currently, researchers are focusing on the ways to satisfy and retain customers due to saturation in major markets of the world. Cellular service providers are not only

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focusing on new customers for maintaining their financial performance but are also striving to retain the existing customers. Many researchers have linked consumer retention with sustainable financial performance for instance (Fornell and Wernerfelt, 1987; Peters, 1988; Reichheld and Sasser, 1990). Steenkamp (1989) has viewed customer retention as one of the factors that can increase market share. The companies striving to maximize their market share have to retain their customers. Yankee (2001) indicated that mobile operators approximate seven times higher cost of acquiring new client on retaining existing clients on an average basis. Normally, mobile operators in dynamic technological environment find it inexpensive to retain their customer base rather than simulating strategies to acquire them. Heejin et al. (2006) has identified the relationship between quality satisfaction and loyalty. As customer satisfaction can be helpful in maintaining customer base [Anderson and Sullivan, (1993); Rust and Zahorik, (1993); Anderson et al., (1994); Jones and Sasser, (1995)], which would result in long-term customer loyalty. Zeithamal and Bitner, (1996) has found out the determinants which would effect consumer satisfaction like, price, call quality, perceptions, values, network coverage and network availability. However, not enough research has been done to study the current trend of markets concurrent with the consumer's interest. Researchers have given special attention to investigate the relationship between loyalty, retention and profitability (Dawkins and Reichheld, 1990; Reichheld, 1996; Reichheld and Sasser, 1990). These studies have mainly attempted to investigate the determinants of customer satisfaction which help the mobile operators to maintain their customer base for example (DeSouza, 1992; Gerpott et al., 2001; Kim et al., 2004) found that these factors are fundamental for the business success.

The following questions are central to this study:

1. What are the determinants of customer satisfaction in cellular industry?
2. What is the relationship between consumer satisfaction and consumer retention?
3. What are the main determinants of consumer retention in cellular industry of Pakistan?

### **Cellular industry of Pakistan**

The telecommunication sector in Pakistan has done outstandingly well in the past few years mainly because of liberalization of global trade and investment industry as well as opening local business to modern technology. It took a drastic change as governments took the initiative to make it a larger player of the industry. At the time of independence, Pakistan has innate and insufficient telecom base of 14,000 land lines. At that phase, post telegraph and telephone were acting as one unit; later in 1962 both were alienated to establish autonomous postal department and telephone and telegraph department. In

the year 1990, Pakistan started to reform measures which were meant to encourage private sector's participation. As per United Nation's prediction, Pakistan's population is likely to grow to 190 million by 2018. Presumptuously that future cellular coverage touch 95% of urban population and 30% of rural population and considering the relative geography and population density of all provinces, there is a probable demand of approximately 25 million cellular subscriptions by 2018. This means that there is a marvelous potential for expansion in this region in the future.

Despite the economic downfall, deregulation of the telecom industry of Pakistan by PTA has revealed positive but slow growth in terms of revenues and subscribers. Telecommunication density of the country has jumped from 44.06% in 2006 - 07 to 58.8% in 2007 - 08. In 1HFY09 it reached to 60% highest in the region. Cellular mobile segment of the industry has been measured as an accelerator of the growth for the telecom industry in Pakistan. Cellular subscribers grew by about 40% in the year 2007 - 08, as against 82% in 2006 - 07 and more than 100% during 2005 - 06. As PTA (Pakistan Telecom Industry, 2009) has tried to put the cellular industry into new stage with the prominence on quality, value added service and competitive pricing with the aim of stabilizing the tariffs.

Figure 1 explains the cellular companies operating in Pakistan and the market share of these companies. There are five companies operating in Pakistan namely; Mobilink, Ufone, Telenor, Warid and Zong. There is hyper competition between these companies especially between Mobilink and Telenor, which are the main players in the cellular industry of Pakistan. As of November 2009, Mobilink is capturing 31.5% of the entire market with highest number of subscribers followed by Telenor having 23% of the market share. Warid is third with a market share of 19.4% followed by Ufone with 19% and Zong with 7.1% of total market share. All companies are striving hard to maximize their market share by intensive marketing campaigns and offering more innovative products at minimum prices.

The study has been separated into three divisions. First division contains theoretical background and development of hypotheses; second division elaborates the research methodology; third section focuses on results and discussions; final section will draw the conclusion of the study.

## **THEORETICAL REVIEW AND DEVELOPMENT OF HYPOTHESES**

### **Service quality and customer satisfaction**

Quality is the overall experience which a customer

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perceives through interacting with a product and service. Parasuraman et al. (1988) has captured the definition of quality taken as a whole judgment. Brown et al. (1992) has referred to organization bearing high service quality as preferable which facilitates them to charge premium price. While Parasuraman et al. (1988) indicate it as "competitive weapon". Quality has been professed as the comparison of perceived performance and expected performance (Kang, 2006).

Earlier studies have judged service quality measures as call clarity, pricing tolerance; value added services, user friendliness and customer support services (e.g., Churchill, 1979; Carol, 1982; Kim, 2000; Gerpott et al., 2001; Lee et al., 2001). For the purpose of this study service quality has been calculated on the basis of such measures. Magnetism of services include variety, convenience, friendliness and ease related to service quality which is being provided by service providers of telecom industry to their customers. Bendapudi and Berry (1997) has affirmed that quality of services would persuade the customer's intent to stay in long term relationship with the organization. Gremler (1995) has found the psychological relationship between customer and a service provider as bond that helps to retain customers in the long term. It can be seen as care, friendliness and ease of communication in delivering quality services to the customers. Woo and Fock (1999) have found that, in Hong Kong, network coverage and call quality has significant influence on customers. Shankar and Krishnamurthi (1996) have focused the firm's attention on the preservation of low price sensitivity which would result in long term profitability. It affects consumer satisfaction (Anderson, 1996). Those consumers who know the actual price of service would be more responsive to the changes in it (Chang and Wildt, 1994). Anderson has found that the satisfied customer would have more price tolerance. Johns and Sue (2000) have acknowledged price and service quality as determinant of customer satisfaction. Kim (2000) has emphasized on the importance of value added services. It was found to effect consumer satisfaction. But the significance of call clarity can be ignored while measuring customer satisfaction, as Kim et al. (2004) has identified call quality as a major factor of consumer satisfaction in Korean mobile phone market. Woo and Fock (1999) have considered call clarity and network coverage as two main issues in the mobile phone industry. Scholars have researched the market with the purpose of finding relationship between satisfaction and complaints handling. Literature uncovers that customer-complaint handling determine customer satisfaction (Hansemark and Albinsson, 2004). The purpose of fixing and elimination of dissatisfaction is known as "Compliant management" (Westbrook and Fornell, 1979). Andreasen (1988) has discovered that 60% of customers gain satisfaction by complaining. He has accredited a negative relationship between customer satisfaction and complaints. The more the complaints

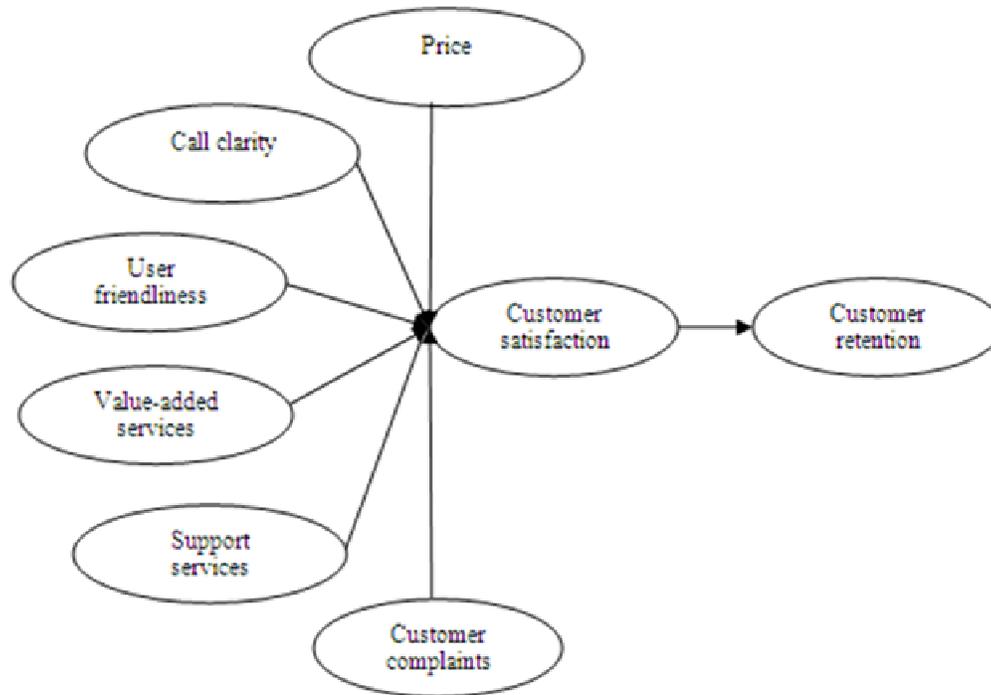
the lesser the satisfaction would be. However, Zeithaml et al. (1990) has concluded that performing the service at the very first time and resolving the issues more promptly will enable the long term tie between service provider and customers. Bowen and Lawler (1990) suggested that the companies can turn the angry customer into a satisfied one by emphasizing on ease and quick response to their complaints. Stephens and Gwinner (1998 p. 172) explained in their research that two-third of customers do not complain. Bosch and Enriquez (2005) have envisioned complaints handling as one of the tools to assess quality. He assumed that if a customer would be satisfied with it, it would satisfy them with the quality as well.

### **Customer retention**

The intent to satisfy customer by bringing quality in the service sector is becoming essential to retain the customer (Brown and Gulycz, 2001). Service industry depends on continuous cycle of repurchase so companies have to struggle hard to retain customers (Anderson et al., 1994). In Pakistan where telecom industry is getting competitive, retaining customer has become essential. Customer retention has undeviating impact on the market share of the organization (Steenkamp, 1989). Canadian scholar Barnes (1997) study has emphasized that loyal customer would keep recommending to others, which helps the organization to earn more customers.

### **Relationships between customer satisfaction and consumer retention**

Cöner and Güngör (2002) found that service quality would lead towards more loyal customers. On the other side Churchill and Surprenant (1982) have defined the term "customer satisfaction" as consequence of comparison between reward and price by acquiring it. Customer satisfaction is a way to pool of benefits. According to Fornell (1992) a satisfied consumer helps the firm to detain market share and to sustain it, creates customer loyalty, shrink consumer price sensitivity and lessen other operating costs. Similarly Jones and Sasser (2000) tied satisfaction and loyalty together. But different scholars have exposed the relationship between quality and customer satisfaction. Researches have argued on two schools of thoughts which are service quality in the forerunner of customer satisfaction (Antreas and Ooulos, 2003; Min and Wan, 2009, Negi, 2009). Cronin and Taylor, 1992; Spreng and MacKoy, 1996) and customer satisfaction helps to develop perception of high quality (Bolton and Drew, 1991). The following model of Figure 2 shows relationship between determinants of



**Figure 2.** Model of consumer satisfaction and consumer retention.

customer satisfaction and consumer retention.

Researchers have identified the factual relationship between quality, satisfaction and retention in the following way. For instance Palkar (2004) stated that quality leads to satisfied customer. Similarly Bolton and Drew (1991) reciprocated the relationship by affirming that satisfaction situates influence on professed quality. Though Steenkamp (1989) mentioned quality as aid to retaining the customer which assists to uphold share in the market, Fornell (1992) acknowledged satisfaction program facilitates retention of customers. Pollack (2009) also suggests different dimensions of service quality to increase customer loyalty.

## RESEARCH METHODOLOGY

### Data and analysis

This research is conducted to measure the determinants of consumer satisfaction in cellular industry of Pakistan. This is an exploratory study, based on primary data. The primary data has been collected from university students. Structural equation modeling has been used to analyze the data and test the hypotheses (Table 1) as used by Kim et al. (2004).

### Sample

The rationale behind selecting students as respondents was that young people are the main users of cellular services, and are also the focus of cellular service providers. Young people pay more attention towards promotional advertisements of cellular companies

and are more conscious of the pricing strategies and innovative product offerings of these companies. 300 students were selected from different universities and survey questionnaires were personally administered. There were 53% male students and 47% female respondents who responded to this survey, with an average age of 20.4 years.

### Instrumentation and measurement

To operationalize and measure the dimensions of consumer satisfaction the instrument was adopted from Kim et al. (2004). Consumer satisfaction and consumer loyalty was measured by instruments adopted by Yu et al. (2005), containing 2 and 5 items respectively. The survey questionnaire contained 27 items including the personal demographics of the respondents like gender etc, whereas the remaining items were measured on 5 point Likert scale.

### Procedure

The study has adopted exploratory technique. The primary data was collected from university students. The logic behind selection of university student was that frequency of use of cellular services is higher in youth than mature individuals. Moreover, students due to having low financial resources, keenly observe the pricing strategies and new schemes of cellular service providers. The students in different universities were approached in their classrooms with the permission of the management of their institutes. Necessary briefings were given to the student regarding the objective of this study and how to fill questionnaires, in order to have reliable and valid information. Difficult terms were also explained to the students for their ease. The students that participated in this survey were from both genders and diverse backgrounds.

**Table 1.** Development of hypotheses.

| Hypotheses     | Statement   |
|----------------|---|
| H <sub>1</sub> | Pricing strategies has significant influence on customer satisfaction.                |
| H <sub>2</sub> | Call clarity has significant effects on customer satisfaction.                        |
| H <sub>3</sub> | User friendliness of service has significant relationship with customer satisfaction. |
| H <sub>4</sub> | Value -added services has significant influence on customer satisfaction.             |
| H <sub>5</sub> | Support services have significant relationship with customer satisfaction.            |
| H <sub>6</sub> | Lower the customer complaints, higher will be the customer satisfaction.              |
| H <sub>7</sub> | Higher the customer satisfaction, higher will be the customer retention.              |

**Table 2.** Index of the fit of the model.

| Index of fit | Chi-square (df) | P     | GFI   | AGFI  | NFI   | CFI   | RMR   |
|--------------|-----------------|-------|-------|-------|-------|-------|-------|
| Value        | 41.150          | 0.005 | 0.896 | 0.822 | 0.555 | 0.687 | 0.072 |

**Table 3.** Regression weights (results of hypotheses tests).

| Path  | Estimate | S.E.  | C.R.  | P    | Hypotheses     | Results |
|---|----------|-------|-------|------|----------------|---------|
| Call clarity – customer satisfaction              | 0.288    | 0.123 | 2.344 | .019 | H <sub>1</sub> | Accept  |
| User friendliness – customer satisfaction         | 0.081    | 0.100 | 0.817 | .414 | H <sub>2</sub> | Reject  |
| Value-added services – customer satisfaction      | 0.032    | 0.120 | 0.266 | .790 | H <sub>3</sub> | Reject  |
| Customer support services – customer satisfaction | 0.162    | 0.090 | 1.793 | .073 | H <sub>4</sub> | Reject  |
| Customer complaints – customer satisfaction       | 0.114    | 0.091 | 1.253 | .210 | H <sub>5</sub> | Reject  |
| Variety of price – customer satisfaction          | 0.231    | 0.098 | 2.348 | .019 | H <sub>6</sub> | Accept  |
| Customer satisfaction – customer retention        | 0.738    | 0.123 | 5.975 | .000 | H <sub>7</sub> | Accept  |

## RESULTS AND DISCUSSION

The index fit of the model is shown in Table 2. With (41.150) degree of freedom into consideration, most index values satisfy the general standard values for index fit. The general accepted standards for model fit are; Chi-square value (significant level > 0.05), goodness of fit index (GFI > 0.80), adjusted GFI (AGFI > 0.80), normed fit index (NFI > 0.90), comparative fit index (CFI > 0.90), and root means square residual (RMR < 0.05). Although this model fit does not meet all standards, it may be an overall accepted model. Moreover the model is considered to be fit if value of P is less than 1 (P < 1). Since the value in this model fit is .005, this is an accepted model that is, the value of Chi-square depicts model fit.

The results of hypotheses tests of the relationship between constructs of service quality, customer satisfaction and consumer retention are given in Table 3 and Figure 3. To accept any hypothesis the p value of the variable must be < 0.05. Table 3 shows that price reasonability; and customer support services effect positively on consumer satisfaction.

Kim et al. (2004) also found positive relationship between call clarity and customer satisfaction in mobile industry of Korea. Whereas customer support services, value-added services, user friendliness, and customer complaints are having no effects on customer satisfaction. In Pakistani cellular industry almost all companies are providing same level of customer support services; value-added services, user friendliness and processing of customer complaints. So these factors do not contribute prominently in gaining competitive advantage over competitor cellular service providers.

However, overall customer satisfaction is having highly significant and positive relationship with customer retention in cellular industry of Pakistan. Ali et al. (2010) also found positive relationship between customer satisfaction and consumer retention in cellular industry of Pakistan.

Zeithaml (1988) relates the satisfaction with the price. McDougall and Levesque (1994) has emphasized on the promised service quality which turns on the satisfaction in consumers. Butt and Run (2008) and Ali et al. (2010) has searched the Pakistani market and found the factual relationship of satisfaction with price and call clarity.

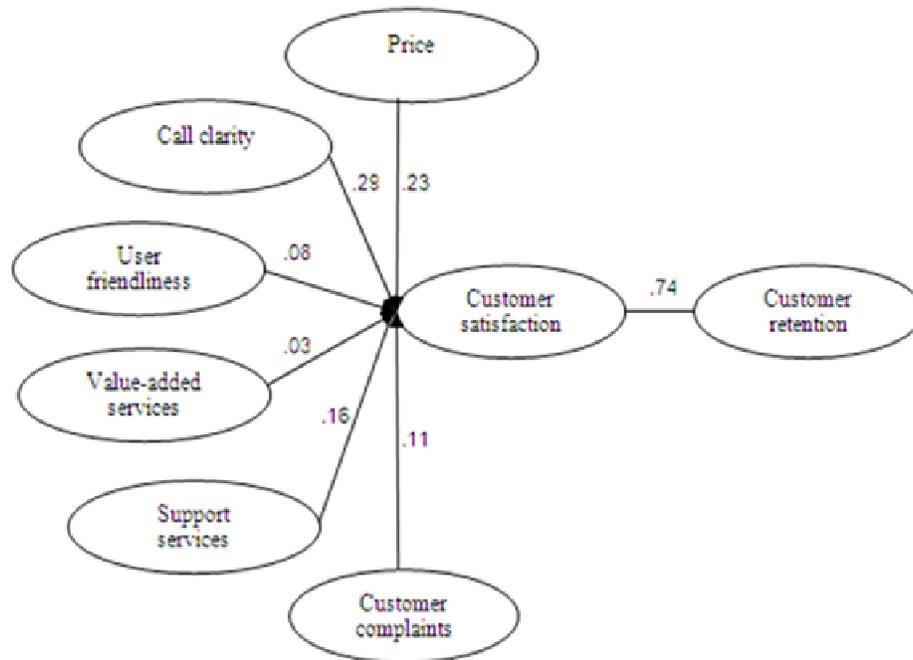


Figure 3. Structural equation model of customer satisfaction and consumer retention.

Johns and Sue (2000) has also figured the positive association of satisfaction with price and quality. Barnes (1997) has acknowledged a bond between satisfaction and retention. More customers can be retained by satisfying them. Ferguson and Brohaugh (2008) also stated price as one of the strong element to develop loyalty among consumers.

**Conclusion**

This study has investigated the determinants of customer satisfaction and consumer retentions in cellular industry of Pakistan. The determinants/factors have been identified which mostly influences the customers in their purchase considerations of cellular services in Pakistan. This is an interesting study in the context that it has filtered among many variables of customer satisfaction and consumer retention. This will provide cellular companies insight of consumer behavior and useful findings for their future perusal.

First, the study has found significant relationship between price reasonability and consumer satisfaction. This employs that fairness of price is the strongest determinant of consumer satisfaction and the competitive advantage to retain consumers for longer period of time. The consumer can even switch if he/she find more reasonable prices with some other cellular service provider. So the service providers are bound to reduce their prices over a period of time. Although basic economic theories discusses the significance of price to

manage market forces, this paper verifies and proves these theories through scientific research for the context of Pakistan.

Secondly, call clarity is also found to be having significant relationship with customer satisfaction and consumer retention. This is an important aspect to retain consumers because if initially consumer chooses any company due to its low prices but does not offer clear voice communication, ultimately the consumer will switch to some other network.

Thirdly, significant and strong relationship was observed among customer satisfaction and consumer retention. This also confirms that the higher the customer satisfaction, the higher will be the consumer retention. In order to retain consumers the service provider should continuously satisfy its customers. As long as the satisfaction level of customer remains high, he/she will use the services of the company. Any decrease in level of satisfaction of customer will also results in reduction of consumers base of the company.

The findings of this study would be helpful for cellular service providers to tailor their products and pricing strategies for maximizing customer satisfaction and retain customers to gain higher market share and profitability.

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