DETERMINANTS OF CONSUMER RETENTION IN CELLULAR INDUSTRY OF PAKISTAN

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ABSTRACT

Cellular industry of Pakistan has grown to many times in recent years. Many new entrants have also joined the market to reap the potentials of this growing industry. This situation has caused a hyper competition among major cellular services providers in Pakistan. Companies are working hard to introduce more innovative and eye-catching products to attract the customers. The companies with large consumer base are striving to reduce their switching costs. The main concern of the service providers is to retain the existing customers. In this context is important to investigate the variables which can help retain existing customers. This research is designed to find out the determinants of consumer retention in cellular industry of Pakistan. This is an exploratory study with focus on primary data which will be collected from University students of Pakistan. The study has used structural equation modeling (SEM) to analyze the data through AMOS 7.0 version. The study found that price reasonability and call clarity as the strongest determinants of consumer retention for the cellular industry of Pakistan.

KEYWORDS

Customer satisfaction, consumer retention, switching cost, cellular industry.

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 end-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 for 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 focusing on new customers for maintaining their financial performance but also 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 Group indicated that mobile operators approximate the cost of acquiring a new client at seven times more than the annual cost of retaining an existing subscriber 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. As 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 Zalorik, (1993); Anderson et al., (1994); Jones and Sasser, (1995)], which would result in long-term customer loyalty. Zeithamal & 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 in concurrent with the consumer’s interest. Researchers have given special attention to investigate the relationship between loyalty, retention and profitability {Dawkins & Reichheld, (1990); Reichheld, (1996); Reichheld & 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, Rams, & Schindler, (2001); and Kim, Park, and Jeong, (2004) found that these factors are fundamental for the business success.

The following questions are central to this study:
- What are the determinants of customer satisfaction in cellular industry?
- What is the relationship between consumer satisfaction and consumer retention?
- What are the main determinants of consumer retention in cellular industry of Pakistan?

LITERATURE REVIEW

The telecommunication sector in Pakistan has done outstandingly well in the past few years mainly due to trade and investment liberalization, privatization and openness to modern technology. It shifts a drastic change as governments took the initiative to make it a larger player of the industry. At the time of independence Pakistan innate an 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 form independent Postal department and Telephone and Telegraph Department (T&T). In the year 1990, Pakistan started to reform measures which were meant to encourage private sector’s participation. According to United Nation’s forecast Pakistan’s population is expected to grow to 190 million by 2018. Assuming that future cellular coverage reaches 95% of all urban population and 30% of rural population and taking into account the relative geography and population density of each province, there is an expected demand of
approximately 25 million cellular subscriptions by 2018*. This shows that there is a tremendous potential for growth in this sector in the future.

Despite the economic down fall, deregulation of the telecom industry of Pakistan by PTA has revealed positive but slow growth in terms of revenues and subscribers. Tele 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.

The study has been separated up 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.

CONCEPTUAL MODEL AND HYPOTHESES DEVELOPMENT

Service quality and Customer Satisfaction. Quality is the overall experience which a customer perceives through interacting with a product and service. Parasuraman et al (1988) has captured the definition of quality as taken as a whole a judgment. Brown (1992) has referred that 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., Kim, 2000; Gerpott et al., 2001; Lee, Lee, & Freick, 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 provider of telecom industry to their customers. AS Bendapudi & 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 turned out as a care, friendliness and ease of communication in delivering quality services to the customers. Woo & Fock (1999) have found, in Hong Kong, network coverage and call quality has significant influence on customers. Shankar and Krishnamurthi 1996 have focused the firm’s attention towards 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 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 major factor of consumer satisfaction in Korean mobile phone market. Woo and Fock 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 (Hansemak & Albinsson, 2004). The purpose of fixing and elimination of dissatisfaction is known as “Compliant management” (Fornell and Westbrook 1979). Andreasen (1988) has identified 60% of customers gain satisfaction by complaining. He has accredited a negative relationship between customer satisfaction and complaints. The more the complaints will be 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 customer. Bowen and Lawler (1990) suggested the companies to turn the angry customer into the satisfied one by emphasizing on ease and quick response to their complaints. Stephens and Gwinner (1998 p.172) exposed in their research two third of customers do not complain. Bosch and Enriquez (2005) have vision 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 & 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 James G. 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 & Consumer Retention.** Cöner and Güngör [2002] found the service quality would lead towards more loyal customers. On the other side Churchill and Surprenanent (1982) have defined the term “Customer satisfaction” as consequence of comparison between reward and price by acquiring it. Customer satisfaction is 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 tied the 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 & Opoulos, 2003; Cronin & Taylor, 1992; Spreng & MacKoy, 1996) and customer satisfaction helps to develop perception of high quality (Bolton & Drew, 1991). The following model shows relationship between determinants of 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 & Drew (1991) reciprocated the relationship by affirming that satisfaction situates influence on professed quality. Though Steenkamp (1989) mentioned quality as aid that retains the customer which assists to uphold share in the market likewise Fornell (1992) acknowledged satisfaction program facilitate to retain customers. The hypotheses developed based on this theoretical discussion have been presented in Table I.

**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 as used by Kim et al (2004). The main point in using SEM is to find the extent to which the model is ‘fit’ or effectively represents the sample data (Byrne, 2001). SEM is a statistical technique for testing and estimating causal relationships using a combination of statistical data and qualitative causal assumptions. This view of SEM was articulated by the geneticist Sewall Wright (1921), the economists Trygve (1943) and Herbert (1953), and formally defined by Judea (2000) using a calculus of counterfactuals. SEM normally starts with a hypothesis, develops it as a model, operationalises the constructs of interest with a measurement instrument, and tests the fit of the model to the obtained measurement data. Among the strengths of SEM is the ability to construct latent variables: variables which are not measured directly, but are estimated in the model from several measured variables each of which is predicted to ‘tap into’ the latent variables. This allows the modeler to explicitly capture the unreliability of measurement in the model, which in theory allows the structural relations between latent variables to be accurately estimated. Factor analysis, path analysis and regression all represent special cases of SEM.

**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 about 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 remaining items were measured on 5 point Likert scale.

RESULTS AND DISCUSSIONS

The index fit of the model is shown in the table II. 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 overall an accepted model.

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

These findings are very logical; in fact people usually consider two factors as most important in selection of cellular provider; price and call clarity. This also confirms the opinions of respondents which were collected in initial pilot testing. 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 (2009) also found positive relationship between customer satisfaction and consumer retention in cellular industry of Pakistan. Zeithaml (1988) relates the satisfaction with the price. McDougall & Levesque (1994) has emphasized on the promised service quality which turns the satisfaction in consumers. As Butt & Run has searched the Pakistani market and found the factual relationship of satisfaction with price and call clarity. Johns and Sue (2000) has also figured the positive association of satisfaction with price and quality. G. Barnes (1997) has acknowledged a bond between satisfaction and retentions. More customers can be retained by satisfying them.

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 biggest determinant of consumer satisfaction and the competitive
advantage to retain consumers for a longer period of time. The consumer can even switch if he/she finds more reasonable prices with some other cellular service provider. So the service providers are bound to reduce their prices over a period of time.

Secondly, call clarity is also found to be having a 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, a significant and strong relationship was observed among customer satisfaction and consumer retention. This also confirms that higher the customer satisfaction – higher will be the consumer retention. In order to retain consumers the service provider should continuously satisfy its customer. As long as the satisfaction level of the customer remains high, he/she will use the services of the company. Any decrease in the level of satisfaction of the customer will also result in a reduction of the consumer 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.

REFERENCES


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**Figure I: Model of Consumer Satisfaction and Consumer Retention**
Table I: Development of Hypotheses

<table>
<thead>
<tr>
<th>Hypotheses statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1 Pricing strategies has significant influence on customer satisfaction.</td>
</tr>
<tr>
<td>H2 Call clarity has significant effects on customer satisfaction.</td>
</tr>
<tr>
<td>H3 User friendliness of service has significant relationship with customer satisfaction.</td>
</tr>
<tr>
<td>H4 Value-added services has significant influence on customer satisfaction.</td>
</tr>
<tr>
<td>H5 Support services have significant relationship with customer satisfaction.</td>
</tr>
<tr>
<td>H6 Lower the customer complaints, higher will be the customer satisfaction.</td>
</tr>
<tr>
<td>H7 Higher the customer satisfaction, higher will be the customer retention.</td>
</tr>
</tbody>
</table>

Table II: Index of the fit of the Model

<table>
<thead>
<tr>
<th>Index of fit</th>
<th>Chi-Square (df)</th>
<th>P</th>
<th>GFI</th>
<th>AGFI</th>
<th>NFI</th>
<th>CFI</th>
<th>RMR</th>
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</thead>
<tbody>
<tr>
<td>Value</td>
<td>41.150</td>
<td>.005</td>
<td>.896</td>
<td>.822</td>
<td>.555</td>
<td>.687</td>
<td>.072</td>
</tr>
</tbody>
</table>

Table III: Regression Weights (results of hypotheses tests)

<table>
<thead>
<tr>
<th>Path</th>
<th>Estimates</th>
<th>S.E.</th>
<th>C.R.</th>
<th>P</th>
<th>Hypotheses</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Call clarity – customer satisfaction</td>
<td>.288</td>
<td>.123</td>
<td>2.344</td>
<td>.019</td>
<td>Accept</td>
<td>H 1</td>
</tr>
<tr>
<td>User friendliness – customer satisfaction</td>
<td>.081</td>
<td>.100</td>
<td>.817</td>
<td>.414</td>
<td>Reject</td>
<td>H 2</td>
</tr>
<tr>
<td>Value-added services – customer satisfaction</td>
<td>.032</td>
<td>.120</td>
<td>.266</td>
<td>.790</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer support services – customer satisfaction</td>
<td>.162</td>
<td>.090</td>
<td>1.793</td>
<td>.073</td>
<td>Reject</td>
<td>H 3</td>
</tr>
<tr>
<td>Customer complaints – customer satisfaction</td>
<td>.114</td>
<td>.091</td>
<td>1.253</td>
<td>.210</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variety of price – customer satisfaction</td>
<td>.231</td>
<td>.098</td>
<td>2.348</td>
<td>.019</td>
<td>Accept</td>
<td>H 6</td>
</tr>
<tr>
<td>Customer satisfaction – customer retention</td>
<td>.738</td>
<td>.123</td>
<td>5.975</td>
<td>.000</td>
<td>Accept</td>
<td>H 7</td>
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