

Customer Satisfaction in Telecom Industry after Mobile Number Portability

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Abstract

Mobile Number Portability was introduced by Pakistan Telecommunication Authority in Pakistan with multi-benefits, which was supposed to provide the flexibility and freedom to subscribers. This is an exploratory research in which the satisfaction level of the customers is analyzed and the data is collected from those mobile users who have been from the process of MNP. Variables of the study includes price, call clarity, user friendliness, value added services, support services and customer complaints. The findings can be useful for regulatory authority, mobile operators; for streamlining the process to have the loyalty which leads to higher profits and it also can be generalized to the other industry having same tough competition.

Key words: Mobile Phone, Mobile Number Portability, Loyalty, Telecommunication, Customer Satisfaction

Introduction:

Mobile Number Portability (MNP) was introduced by Pakistan Telecommunication Authority in Pakistan (PTA, 2005) with multi-benefits to provide the flexibility and freedom to subscribers; one of them was to create a barrier for monopoly, and to have perfect competition. The process started slowly and there was not much concentration of operators as well as of customers. When the number of operators reached to six and big players entered into the market such as Telenor and China Mobile, competition among companies began. One of the old mobile operators was having strong customer base and large network advantage. First the focus of new entrants was on niche markets but there were not enough gaps in the segmentations which could have satisfied them so they started aggressive marketing and tried to capture the market share more and more. New sale was not supporting them as a single customer was having the SIMs of all networks so they tried the tool which was created by PTA for the benefits of customer. Different offers were started, in the begging MNP was charged, they made it free than started to give the free air time (FAT) amount as preloaded balance given in MNP SIMs. This was not the end to attract the customers; they gave the free minutes and SMS on converting the number to their network and very heavy budgeted marketing campaigns were started. Customers were attracted and started getting benefits from them.

Customers faced many problems in MNPs, such as problem in calls and SMS; which was the basic promise of their brands and sometime number was not properly even active on any network; both operator's SIMs were not

working. Customer was able to receive the incoming calls from A network and outgoing calls from B network. So this disappointed the customers and it lessened the rate of MNPs. Companies were not ready to leave the ongoing war on number of subscribers, price, network etc. So they started the wrong way by which MNPs were processed. They used the two to three ways; one of them was giving commission to retailers to get the MNP solution by which MNP request was initiated. Real and Fake MNPs created many problems for customers though they have been awarded by certain benefits, in this situation level of satisfaction after quitting from parent network could reveal the real picture, so the objective of this paper is to see the satisfaction of those customers who have been from the process of MNP, either real or fake.

Telecom Industry:

Pakistan is considered within those countries which provide the lowest call rate to its subscribers Board of Investment of Pakistan (BOI, 2011). Telecom industry in Pakistan has a huge subscriber number; it has reached to 105,151,871 (PTA, 2011), from which companies want to get the loin share. Each company tries to increase its customer base. Their continuous efforts have grown the teledensity up to 68.8% and revenues earned by sector are \$357,712 million (PTA, 2011). Currently five mobile operators are operational in the industry, Mobilink is on top to have the 32,499,495 subscribers, while Telenor 25,388,878, Ufone 20,368,752, Warid 17,693,626, Zong 9,201,121 are having subscriber base. Companies are motivated to have FDI, figure 1 is given for details in which from 2004 to 2010 data is summarized.

Figure 1

| Year | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 | 2009-10 |
|---|------------|------------|------------|------------|------------|-------------|
| Subscriber numbers | 12,771,203 | 34,506,557 | 63,159,857 | 88,019,812 | 94,342,030 | 102,777,387 |
| Total Teledensity (%) | 11.89 | 26.26 | 44.06 | 58.9 | 62 | 65.4 |
| Revenues | 144,226 | 194,562 | 235,613 | 278,509 | 333,882 | 357,712 |
| Foreign Direct Investment (US \$ million) | 1,524.00 | 3,521.00 | 5,140.00 | 5,410.00 | 3,720.00 | 2,199.00 |

Source: Pakistan Telecommunication Authority

Mobile Number Portability:

Before 2005 in Pakistan customers have to give up his/her previous number for using another operator services in case of dissatisfaction. For this they needed to have new business cards printed, let other contacts informed of it and loss of valuable calls. Pakistan Telecommunication Authority (PTA) introduced this concept first time in South Asia and defined it as "Mobile Number Portability or MNP" means the ability to retain an existing Subscriber number along with Operator code while shifting connectivity from one Operator to another Operator (PTA, 2005), As per Pakistan Mobile Number Portability Database (PMD, 2010), a total of 2.4 million customers have availed the service till February 2010.

(Buehler. S, Dewenter. R, Haucap. J 2006) discusses that switching cost is lowered by MNP and churn is expected to increase and by this competition is increased, further he even could not become able to collect the whole data of Europe but as per his findings most of the countries' ratio of MNP was being increased.

MNP is considered successful by looking at the figures of different countries, in Turkey 50,000 mobile subscribers got the MNP services on the first day of its implementation (TT Bureau, 2008). In India; MNP launched after Pakistan, has opted more than 1.7 million subscribers to be benefited from the MNP to retain their number Telecom Regulatory authority of India (TRAI, 2011). Telenor in Pakistan has been successful to attract the one million customers for MNP and the first operator to achieve this landmark. (PMD, 2010) In Pakistan, Pakistan Mobile Number Portability Database (Guarantee) Limited Company (PMD) is responsible to support the operators in the MNP process. There is lack of availability of data on the official web of PMD, the maintained figures are not even available to PTA site, but from marketing campaign of operators it could be deduced that there is enough concentration on MNP in Pakistan.

Customer Satisfaction:

There are several dimensions of satisfaction, generally differ in service, product context and by industry (Aaker 1996). In service organizations, satisfaction is considered as powerful measure (Aaker 1996). Customer satisfaction is used by companies to evaluate the product or services supplied to customer (Nemati 2010). Study of (Ali et al. 2010) found that reasonable pricing can be the determinant of consumer satisfaction for longer period of time. While (Nemati 2010) discusses that the mental satisfaction is received by customers on paying high price in the country like Pakistan. Innovation in the mobile phone has a positive effect, though was not

measured very strong (Nemati 2010). Higher the satisfaction will leads to higher retention, so operators should be satisfying the customers in order to retain them (Ali et al. 2010). There is only limitation of satisfaction, discussed by (Aaker 1996) is non-customers.

The definition of satisfaction is borrowed from (Oliver, 1997), which is used for this research, Customer satisfaction generally means customer reaction to the state of fulfillment, and customer judgment of the fulfilled state.

There are multidimensional aspects of customer satisfaction in mobile services (Min & Wan, 2010). As per (Lee et al. 2001) measuring satisfaction could be grouped into three categories, pricing, core services, value added services. While (Lim et al. 2006) has identified customer services, billing system, locator services, entertainment services, messages/data services, network quality other than the lee et al. factors.

Customer reaction and judgment of fulfilled state can be measured in telecom by knowing the satisfaction from price, call clarity, user friendliness of services, value added services, support services and customer complaints (Ali et al. 2010)

Price is an important element in the purchase and continuity of service so is its influence on satisfaction (Herrmann, 2007). Price satisfaction is positively correlated with its fairness (Bowman and Narayandas, 2001), quality and service makes the price fairness perception (Oliver and Swan, 1989). Consumer can even switch if more reasonable prices in telecom are available (Ali et al. 2010).By this we can understand that there is strong relationship of price with satisfaction and this factor will let us know the level of satisfaction of customers after MNP.

Call clarity is the basic function of telecom services which are promised with the customer, by price a customer can chose another network but can also take back decision due to call clarity issue (Ali et al. 2010). From this it could be concluded that a MNP done for the sack of price satisfaction can be reverted due to call clarity. User friendliness in telecom services is very essential as customer uses the software and applications, while some other services are IVR based, if user even cannot understand the operating procedure, will not be satisfied from those services. Value added and support services given by operators in Pakistan are of same bench marking (Ali et al. 2010). While complaint procedures are mostly followed as per PTA guidelines.

Given the literature and related material this paper proposes the following hypothesis for testing,

H1 Pricing strategies have significant influence on customer satisfaction.

H2 Call clarity has significant effects on customer satisfaction.

H3 User friendliness of service has significant relationship with customer satisfaction.

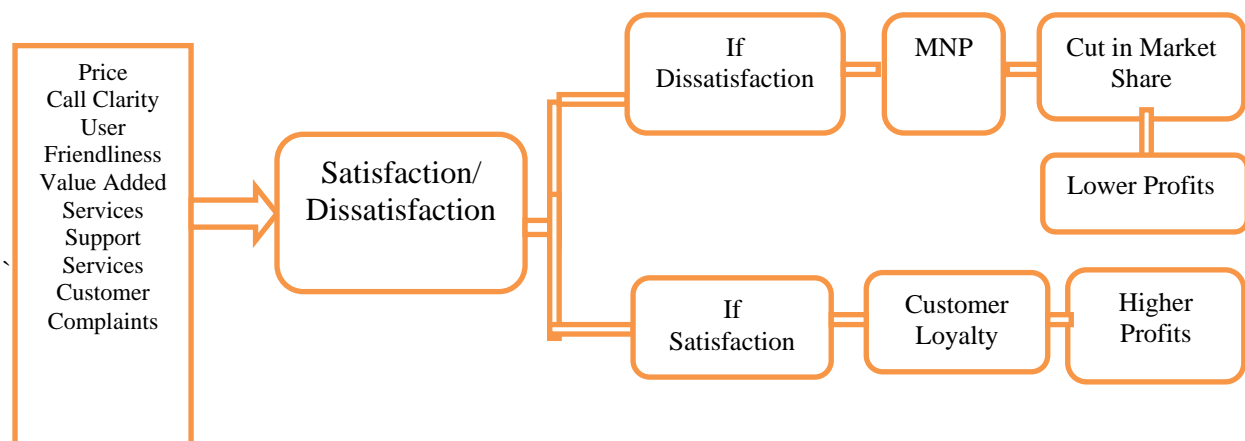
H4 Value -added services has significant influence on customer satisfaction.

H5 Support services have significant relationship with customer satisfaction.

H6 Lower the customer complaints, higher will be the customer satisfaction.

Theoretical Model:

The conceptual model is made to have the clear picture of the research work, for measuring satisfaction of telecom customers; variables in the model are used of (Ali et al. 2010) study



They have used the price, call clarity, user friendliness, value added services, support services, customer complaints as independent variables and satisfaction as dependent variable, which was first used in the study of Kim et al. (2004). Same is borrowed to check the satisfaction level of MNP customers. Further model define that if a customer is dissatisfied, will go for the option of MNP, which will cut the market share of a company and that will result losses in revenue of the company. If customer is satisfied, loyalty is increased; customer loyalty means to be the customer of the same brand, customer loyalty being dependent variable of customer satisfaction is a major driver of sustainable profitability, which increases the revenues of the company (Min & Wan, 2010).

Methodology:

An empirical study is conducted based on data collected from the interior Sindh, Pakistan. It's an exploratory research in which response of customers is checked. Primary data was collected to see the satisfaction of those customers who have been from the process of MNP. Level of satisfaction and retention is checked by using the hypothesis and structural modeling of Kim et al. (2004) & Ali et al. (2010). The reason to use the same instrument was that same research has been conducted and model is testified; just dimension was of this study is change, both authors have tried to see the satisfaction and retention while in this study satisfaction is checked when a customer has switched and using another operator services.

Sample:

In the study 144 respondents have participated, who were asked to fill the questionnaire. Convenient sampling was used to collect the data as it was hard to reach the mobile users who have been from the process of MNP. Both rural and urban customers were appreciated to participate in the study, 68 percent were urban users and 32 percent were rural. Age groups which participated the most were 20-29 with 51 percent and 30-39 was 22 percent, while 19 or less was 13 percent, 40-49 was 8 percent and 50 or more was 5 percent. Study includes the participation of 70 percent male while 30 per cent are female. Response Rate from Ufone, Mobilink, Zong, Telenor, Warid customers was 30, 27, 16, 14 and 13 percent respectively. 50 percent user were using only one connection, 28 per cent were using two, 13 per cent three, 6 per cent four and 5 percent were using the five or more connections. 59 percent were not using the internet services, 30 percent were having limited use while 11 per cent customers were having unlimited usage of mobile internet.

Instrument and data collection

The survey questionnaire contained 24 items including personal demographics and mobile usage. A five point likert scale was used to measure the level of satisfaction from very low to very high. Instrument was borrowed from the Ali et al. (2010) study as well used by Kim et al. (2004), customer retention variables which were tested by both studies, were excluded as customers have already switched to other operator. Just the part which was measuring the satisfaction was used in the study. Data was collected from the customers who have switched mobile phone services with the help of MNP. Five telecom operators are working in Pakistan, and it is tried to get the data from the customers of all operators to have significant results. In the beginning response rate was very low however with further efforts more respondents were motivated to participate. This was done by using retailers and services providers in the value chain. In total 300 questionnaires were distributed from which 160 are generated with in two months, 144 were found useful while 16 were excluded from the study. The one's excluded had many items missing.

Results and discussion

Reliability of 16 items that determining the customer satisfaction were submitted to consistency analysis (reliability analysis) using cronbach's alpha statistics. The result is shown in table 1 and alpha is recorded av. 0.80 which indicates a higher degree of consistency and validity (Hair et al., 2004).

The regression model was tested and the result indicates a sharp fit in the model as represented by R2 in the table 2.

All hypotheses that were tested failed to be rejected as indicated in the table Table: 3. all hypotheses have been found significant and are accepted. From the results it could be concluded that after switching customer is more satisfied. The research work of Ali et al. (2010) found call clarity and customer satisfaction significant with the P value of .019, variety of price and customer satisfaction .019, customer satisfaction and customer retention .000, while other hypotheses were rejected due to insignificant P value. Kim et al. (2004) found call quality and customer satisfaction P value .001, value added services and customer satisfaction.000, customer support and customer satisfaction .000 of satisfaction part of the study while other hypotheses were rejected.

In this study the significance level of call clarity, user friendliness, value added services, customer support services, customer complaints and variety of price are given in the table 3.

Conclusion

The study has investigated the satisfaction level of customers after MNP in the telecom industry of Pakistan. The factors which were already tested in previous studies for measuring customer satisfaction are used. The results have testified that after MNP customer is satisfied from call clarity which is the basic promise of the service providers. Value added services have also significant impact on the customer satisfaction; even it's not the core promise of service providers. The response of customer shows that either core or value added benefits are to be user friendly.

Customer supports are the mandatory for the service organization and in this study customers are satisfied from the support services, touch points, speed of complaint processing, friendliness while reporting complaints. Price which is understood very critical to measure the satisfaction level, has been found significant with the customer satisfaction after MNP, it could be because of customer has switched as per his/her need of pricing plans.

The results show all the hypotheses significant with the customer satisfaction which means the MNP step taken by PTA for the sack of customers is a good decision. Besides the market wrong practices, customers are quite satisfied to be in freedom to select the services of their own choice.

The companies could be benefited from this research to learn that if customers are to be satisfied, they should consider the above factors. From this it could be exemplified for other industries as well, that for satisfy the customer, free choice should be given.

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Annexure

Table 1

| | |
|------------------|------------|
| Cronbach's Alpha | N of Items |
| .801 | 16 |

Table 2

Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|------|----------|-------------------|----------------------------|
| 1 | .763 | .582 | .533 | .65627 |

Regression Analysis Table 3

| Path | Estimation | Standard Error | t | Sig. | Hypotheses | Results |
|---------------------------|------------|----------------|-------|-------|------------|----------|
| Call Clarity | 0.438 | 0.091 | 4.791 | 0 | H1 | Accepted |
| User-friendliness | 0.326 | 0.1 | 2.266 | 0.001 | H2 | Accepted |
| Value-added services | 0.462 | 0.096 | 4.839 | 0 | H3 | Accepted |
| Customer support services | 0.467 | 0.092 | 5.081 | 0 | H4 | Accepted |
| Customer Complaints | 0.445 | 0.071 | 6.311 | 0 | H5 | Accepted |
| Variety of price | 0.295 | 0.093 | 3.165 | 0.002 | H6 | Accepted |