

The Effect of Satisfaction, Trust and Switching Barriers Service Provider on Customer Loyalty (Mobile Phone Users of Iran Cell Company In Iran)

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Abstract: Because the cost of attracting new customers is much higher than the cost of retaining old customers, keeping customers loyal is a crucial issue for service firms. This research explores how relationship quality and switching barriers influence customer loyalty. Relationship quality consists of two aspects: satisfaction and trust. To test the proposed research model, a survey research methodology was used. Paper survey was distributed to mobile phone users in Science and Research Branch Islamic Azad University in Iran. A total of 380 valid questionnaires were returned. Structural equation modeling was used to test hypotheses. Satisfaction, trust and switching barriers have positive effects on loyalty. In term of antecedents, it was found that playfulness and service quality impact satisfaction while service quality and intimacy affect trust. From a managerial perspective, this research suggests that practitioner should not only keep improving service quality, but also provide playfulness to ensure customer satisfaction.

Key words: satisfaction, trust, switching barriers, service quality, Playfulness, Intimacy.

INTRODUCTION

Research looks at why customers switch service provider and its important. This research looks at the decision to stay and the reason behind it (Colgate and Lang, 2001). Customer loyalty is not a new research question and prior research has studied an array of factors leading to customer loyalty, such as service quality, customer trust, satisfaction, and switching barriers. Retaining current customers is imperative for saturated service industries such as mobile services. Thus customer loyalty is an extremely important issue for mobile service providers. However, in mobile marketing consumer behavior research, excessive attention has been paid to initial adoption and acceptance while little has to post-purchase constructs, such as satisfaction and loyalty. In this research, we focus on customer loyalty in mobile communications (Liu and *et al*, 2010).

From the perspective of the customer, two aspects of service affect the decision to remain or defect: what makes a customer want to stay, and the tangible and intangible costs of switching to another provider. The first is a pull-in force, while the second is a push-back force. The pull-in force in the model is relationship quality, including satisfaction and trust. Satisfied and happy customers normally have no reason to leave. Customer trust is important in that customer privacy and data exchange security are issues with mobile telecommunication. The push-back force explored is switching barriers. Although prior research has investigated the effects of relationship quality on loyalty and that of switching barriers on loyalty (Jones and *et al*, 2000). less often they are studied at the same time. Our approach is to examine their relative effects on customer loyalty.

Theoretical Framework, Conceptual Model and Hypotheses:

Customer Loyalty:

Loyalty has been defined as “a deeply held commitment to rebuy or repatronize a preferred product/service consistently in the future” (Liu and *et al*, 2010). Approaches to the study of customer loyalty fall into three broad categories: the behavioral approach, the attitudinal approach and the integrated approach. The integrated approach takes account of both behavioral and attitudinal variables, in order to create its own concept of customer loyalty. We adopt the integrated theory of customer loyalty as our methodological framework. The concept of customer loyalty is understood as a combination of customers’ favorable attitude and the behavior of repurchase (Kim and *et al*, 2004). The degree to which the customer has exhibited, over recent years, repeat purchase behavior of a particular company service; and the significance of that expenditure in terms of the customer’s total outlay on that particular type of service (Hellier and *et al*, 2003).

Customer loyalty has two meanings: long-term and the short-term loyalty. Customers with long-term loyalty do not easily switch to other service providers, while customers with short-term loyalty defect more easily when offered a perceived better alternative. This study focuses on long-term loyalty. It is beneficial for service providers to establish a relationship with customers that customers would like to retain (Liu and *et al*,

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2010). In Iran, the mobile service market is highly saturated and profit margins are stagnant. In this situation, it is better to retain existing customers than recruit new ones.

Satisfaction:

Customer satisfaction is an overall attitude formed based on the experience after customers purchase a product or use a service (Fornell, 1992). It is a reflection of being content with such a product or a service (Liu and *et al.*, 2010). Customer satisfaction generally means customer reaction to the state of fulfillment, and customer judgment of the fulfilled state (Kim and *et al.*, 2004). Attempts to understand customer satisfaction formation have yielded several important insights. For example, disconfirmation and perceived quality were found to affect customer satisfaction more than expectations and expectancy-disconfirmation (Lee and *et al.*, 2001). The degree of overall pleasure or contentment felt by the customer, resulting from the ability of the service to fulfill the customer's desires, expectations and needs in relation to the service (Hellier and *et al.*, 2003).

Satisfaction is the assessment of the experience of interacting with a service provider up to the present time, and is used by customers to predict future experience (Crosby and *et al.*, 1990). Satisfaction is a broad feeling, which is affected by service quality, product quality, price, and contextual and personal factors (Zeithaml and Bitner, 2000). Satisfaction is one of the antecedents of customer loyalty. In prior studies, satisfaction positively affects customer loyalty. Although the reason that customers remain loyal may not always be satisfaction, it is safe to say that satisfied customers are more loyal (Liu and *et al.*, 2010). Thus, the following hypothesis is tested.

H1. Satisfaction has a Positive Effect on Loyalty:

Trust:

Trust has been defined as one party believing that the other party will fulfill his or her needs (Roberts and *et al.*, 2003). In terms of services, trust is the belief held by a customer that the service provider will provide the service that meets customer needs. A more general definition of trust is that a party has confidence in the honesty and reliability of his partner. This definition can be applied in different contexts, including exchanges of goods and services (Liu and *et al.*, 2010). Rotter (1967) views trust as "a generalized expectancy held by an individual that the word of another . . . can be relied upon." Trust implies a notion of confidence and trustworthiness that results from the partner's expertise, reliability, or intentions (Chenet and *et al.*, 1999).

Doney and Cannon (1997) argue that trust consists of two aspects: perceived credibility and benevolence.

There are two levels of trust: At the first level, the customer trusts one particular sales representative while at the second level, the customer trusts the institution. In mobile data service, customer trust exists more at the second level. Customers trust the service provider as a whole because during the process of signing up for services, changing services, and customer support, it is possible that sales representatives are different. Trust is an important mediating factor between customer behavior before and after purchasing a product. It can lead to long-term loyalty and strengthen the relationship between the two. As with loyalty, trust is a special psychological state that can only occur in certain relationships. When a customer trusts an organization, he or she has the confidence in service quality and product quality of the organization. Customers who trust an organization are more than likely to be loyal to the company (Liu and *et al.*, 2010). In this research we are interested in the direct effects of satisfaction and trust, as components of relationship quality, on customer loyalty. Thus, the following hypothesis is proposed.

H2. Trust has a Positive Effect on Loyalty:

Switching Barriers:

Switching barriers are factors that make it difficult for a customer to change service providers (Jones and *et al.*, 2000). Even when customers are not satisfied with the current service provider, customers may still remain with the provider because of potential financial and social loss and/or psychological burden. If relationship quality is a pull-in force, switching barriers are a push-back force. Switching barriers are defined as economic and psychological inconveniences which consumers have to endure during switching to a new service provider (Kim and *et al.*, 2004). Some of the factors that can increase switching barriers are search costs, transaction costs, learning costs, loss of loyal customer discounts, loss of established habits and relationships, and risk of the unknown (Liu and *et al.*, 2010). The positive impact of switching barriers on repurchase intention has been widely confirmed (Colgate and Lang, 2001). If switching barriers such as the troublesomeness of switching or loss of special treatment are high, customers are likely to stay with the same service provider to avoid potential costs and losses, even if the customers are not satisfied (Jones and *et al.*, 2000). In prior research of mobile services, switching barriers have been found to lead to customer retention and customer loyalty among Korean mobile users (Kim and *et al.*, 2004). It would be useful to explore this relationship in other contexts, such as in Iran, which shares a number of similarities with Korean markets. Based on the literature, the following hypothesis is proposed.

H3. Switching Barriers have a Positive Effect on Loyalty:

Playfulness:

In addition to the basic services, something extra can make customer “surprisingly” satisfied. These things extra are called satisfiers (Naumann and Jackson, 1999). One example is service playfulness in mobile communications. In the past, mobile services are thought to be highly utilitarian. Hedonic values provided by “fun” features might not be the priority of a user. Since then more and more entertainment features have been added, such as games and music. We are particularly interested in this aspect of mobile services since technologies increasingly provide hedonic values (Pura, 2005). However it was still less explored than utilitarian-oriented constructs, such as perceived usefulness and ease of use in technology adoption and acceptance (Varnali and Toker, 2009).

Playfulness has two aspects (Barnett, 1991). First, it is a trait of an individual. It is more stable and less influenced by context. The second meaning of playfulness is a state that an individual experiences. It is the result of the interaction between the individual and the situation. It can be achieved in a short period of time and change over time. Moreover, it is influenced more by external, contextual factors (Liu and *et al.* 2010). We focus on the second meaning in the research. Based on the prior research, the following hypothesis is proposed.

H4. Playfulness has a Positive Effect on Satisfaction:

Service Quality:

Discussion of service quality has resulted in the realization of the intangible, heterogeneous, and inseparable nature of the concept (Parasuraman and *et al.* 1988). Thus it is hard to measure it with the same measurement for product quality. Service quality is also defined as the difference between customer expectation and the perception of service quality. It is measured by five constructs: reliability, responsiveness, assurance, empathy, and tangibility (Parasuraman and *et al.* 1988). Gronroos defines two dimensions of service quality; namely, *technical quality* or *what* is received by the customer, and *functional quality* or *how* the service is provided (Chenet and *et al.* 1999). Research into service quality in the mobile telecommunications industry extends the traditional definition of service quality and incorporates aspects particularly relevant to mobile services. For example, in a study of Turkish mobile services, it has been measured by coverage of calling area, value-added services, advertisement, services in campaigns, the suppliers’ services of the operator, vendor services, and customer support services. These aspects are geared toward the service practice of GSM networks in Turkey (Liu and *et al.* 2010). In another study of service quality of Korean mobile services, call quality, value-added quality, and customer support are the three sub-constructs of service quality (Kim and *et al.* 2004). In this study, service quality is defined as the whole service quality perceived by customers after using the service. In contrast to playfulness, service quality is long thought to be very important to customer satisfaction and trust. It is also one of the often studied antecedents of relationship quality. Service quality represents basic customer expectations, thus, a hygiene factor (Liu and *et al.* 2010).

While some suggest that satisfaction drives quality, the preponderance of evidence indicates that quality drives satisfaction (Lai and *et al.* 2009). In a study of service quality in banking, hospitals, and photo development, service quality was found to have a positive effect on relationship quality, which includes satisfaction and trust (Liu and *et al.* 2010). Further, the quality → satisfaction link holds up across different cultures and explains more variance in customer loyalty (Lai and *et al.* 2009). Quality of service has also been identified as a potential antecedent of satisfaction (Ennew and Bink, 1999). In a study of Korean mobile services, improving service quality is found to positively affect customer satisfaction (Kim and *et al.* 2004). Thus, the following hypothesis is proposed.

H5. Service Quality has a Positive Effect on Satisfaction:

Caceres and Paparoidamis (2007) indicate the increase in customer’s perceptions of service quality will influence aspects of relationship quality such as satisfaction and trust. It is also found that service quality has a significant effect on consumer trust towards a financial institution (Liu and *et al.* 2010). Thus, the following hypothesis is proposed.

H6. Service Quality has a Positive Effect on Trust:

Intimacy:

Customer intimacy is recommended as one of the three value disciplines that are available to companies for delivering values to their customers. It requires companies understand their customers and meet their special needs (Treacy and Wiersema, 1993). Through interaction between service providers and customers, overtime, the feeling is strengthened and evolves into a long-term bond (Gwinner and *et al.* 1998). Intimate ties can be established during face-to-face contacts or in technology-mediated contexts. In our study, we define intimacy as the perceived psychological closeness a customer has with the service provider. Companies want to establish this kind of rapport with their customers, and customers also want to develop and maintain a worthwhile and convenient connection with the company (Berry and Parasuraman, 1991).

Intimacy may share some similarities with empathy, a dimension of service quality. They are two different constructs in that empathy focuses more on individual care and attention (Soteriou and Chase, 1998) .We consider intimacy a satisfier. Customers do not need to feel intimate with a service provider to find it trustworthy in terms of competence and benevolence (Liu and *et al.*, 2010). However, once a customer invests in and establishes a closer relationship with a service provider, the relationship can increase the trust the customer has in the company (Jones and *et al.*, 2000). Thus, the following hypothesis is tested.

H7. Intimacy has a positive effect on trust:

Method:

Questionnaire design:

The measurement items used in this study are listed in Appendix. Measures for service quality consisted of four items based on Brady and Cronin (2001) and Hsieh and Hiang (2004). A threeitem scale adapted from Moon and Kim (2001) was used as the measure of playfulness. Measures for intimacy consisted of three items, which were adapted from Kim and *et al.* (2004). Satisfaction was measured by a three-item scale based on Hsieh and Hiang (2004). The three items were formatted using 1 = very unsatisfied; 5 = very satisfied. Trust was measured by a three-item scale adapted from Hsieh and Hiang (2004). Both satisfaction and trust scales were based on measures of relationship quality (Crosby and *et al.*, 1990). The two-item scale for switching barriers and the two-item scale for loyalty were adapted from Kim *et al.* (2004). Except items related to satisfaction, the items were constructed using a 5-point Likert- Scale ranging from strongly disagree to strongly agree (1 = strongly disagree; 5 = strongly agree).

Sampling and Respondent Profile:

The standard questionnaire was translated from English to Farsi, and by using the back translation method, translated from Farsi to English. Paper survey was distributed to mobile phone users of Iran cell company. During a period of one month, 380 questionnaires were collected through a proportional sampling method from students of Science and Research Branch Islamic Azad University. Of the respondents, 42 percent were males and 58 percent were females. The respondents can be considered as rather young: 56 percent of them were between 19 and 23 years old. 55 percent of respondents had Bachelor degrees. Table 1 shows the demographics of respondents.

Table 1: Demographics of respondents.

| Demographic variables | Category | Sample | Percentage |
|-----------------------|----------|--------|------------|
| Gender | Male | 156 | 42 |
| | Female | 224 | 58 |
| Education Level | Bachelor | 209 | 55 |
| | Master | 120 | 32 |
| | PHD | 51 | 13 |
| Age | ≤18 | 13 | 3 |
| | 19-23 | 155 | 40 |
| | 24-28 | 117 | 31 |
| | 29-33 | 47 | 12 |
| | 34-38 | 35 | 10 |
| | 39-43 | 9 | 3 |
| | ≥44 | 4 | 1 |

Demographics of respondents are in the table1.

Analysis and findings:

This research followed a two-stage approach to data analysis. First the construct validity of the measurement model was assessed using confirmatory factor analysis (CFA); then the proposed theoretical model (Fig. 1) and research hypotheses were tested by structural equation analysis. Both phases used the LISREL 8.54 program.

Measurement Model:

When testing the validity of the measurement model, the Chi-square statistic was significant. the Goodness-of-Fit Index (GFI) was .87, Adjusted Goodness-of-Fit Index (AGFI) was .88, Normed- Fit Index (NFI) was .95, Nonnormed-Fit Index (NNFI) was .95, Comparative-Fit Index (CFI) was .95, and the Root Mean Square Error of Approximation (RMSEA) was .088. All were in acceptable ranges, indicating a reasonable fit.

The next step was to examine the measures of the four aspects: individual reliability, construct reliability, convergent validity, and discriminant validity.

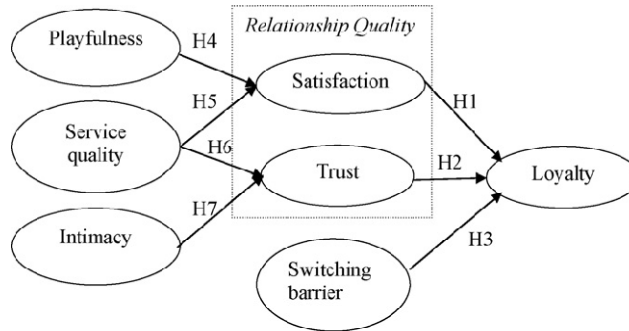


Fig. 1: Conceptual model.

To examine the construct reliability, this research used Cronbach’s α . For all constructs in the measurement model, each Cronbach’s α is above .70. Thus, all constructs in the measurement model had adequate reliability.

To assure convergent validity, all factor loadings of items should be significant (their t-values should exceed 1.96) and the value of average variance extracted (AVE) should exceed .50. A value of AVE exceeding .50 demonstrates that more than 50% of the variance of the construct is due to its indicators. The AVE of all constructs exceeded .50, indicating constructs had acceptable convergent validity overall.

Table 2 shows intercorrelations and share variances among constructs. The cells on the diagonal are constructs’ Cronbach’s α (in italic). The cells on the bottom left corner are intercorrelations while the cells on the upper right corner (in bold) are shared variances. The values of AVE are listed too. As evidence of discriminant validity, all the intercorrelations are smaller than reliability Cronbach’s α . In addition, the explained variance (i.e., AVE) of constructs in the measurement model exceeds all combinations of shared variances of corresponding construct. Discriminant validity of measures was also assessed by examining the confidence interval around correlation (\pm two standard errors) of two constructs. The confidence interval should not include 1.0, indicating the two constructs are not the same. In our study, confidence intervals around correlations of paired constructs range from .13 to .79. Results of the tests support the discriminant validity of the studied model.

Table 2: Scale analysis results.

| | Playfulness | Service quality | Intimacy | Satisfaction | Trust | Switching barrier | Loyalty | AVE |
|-------------------|-------------|-----------------|------------|--------------|------------|-------------------|------------|-----|
| playfulness | <u>.86</u> | .84 | .61 | .62 | .71 | .34 | .32 | .75 |
| Service quality | .84 | <u>.91</u> | .84 | .54 | .62 | .62 | .62 | .84 |
| intimacy | .61 | .84 | <u>.84</u> | .71 | .74 | .67 | .70 | .71 |
| satisfaction | .62 | .54 | .71 | <u>.82</u> | .73 | .58 | .78 | .68 |
| trust | .71 | .62 | .74 | .73 | <u>.76</u> | .62 | .75 | .58 |
| Switching barrier | .34 | .62 | .67 | .58 | .62 | <u>.86</u> | .77 | .74 |
| loyalty | .32 | .62 | .70 | .78 | .75 | .77 | <u>.93</u> | .87 |

Intercorrelations are included in the lower triangle of the matrix. Shared variances in % are included in the upper triangle of the matrix. The construct reliability estimates are underlined and positioned on the diagonal.

Confirmatory factor analysis (CFA) is a special form of factor analysis. It is used to test whether measures of a construct are consistent with a researcher's understanding of the nature of that construct (or factor). Factor analysis is a common statistical method used to find a small set of unobserved variables (also called latent variables, or factors) which can account for the covariance among a larger set of observed variables (also called manifest variables). Figure 2 shows Measurement model.

Structural Model:

Maximum-likelihood-estimation procedures were used to examine the hypothesized relationships in the research model. Based on the model performance statistics (GFI = .93, AGFI = .87, CFI = .95, NFI = .95, NNFI = .95, RMSEA= .083, RMR= .14, SRMR=.05, IFI=.95), it can be concluded that the hypothesized model had a reasonable fit. The next step involved testing the specified paths for hypotheses. The path coefficients and t-values are reported in Table 3. All proposed paths were significant. Therefore, all hypotheses were supported. In this research, the total model explained 54% of the variance in customer loyalty. Playfulness and service quality accounted for 47% of the variance in satisfaction. Service quality and intimacy accounted for 36% of the variance in trust.

$$\begin{aligned} \text{Loyalty} &= 0/28 \text{ satisfaction} + 0/40 \text{ trust} + 0/14 \text{ switching barrier} \quad (R^2=0/54) \\ \text{Satisfaction} &= 0/14 \text{ playfulness} + 0/44 \text{ service quality} \quad (R^2= 0/47) \\ \text{Trust} &= 0/67 \text{ service quality} + 0/56 \text{ intimacy} \quad (R^2= 0/36) \end{aligned}$$

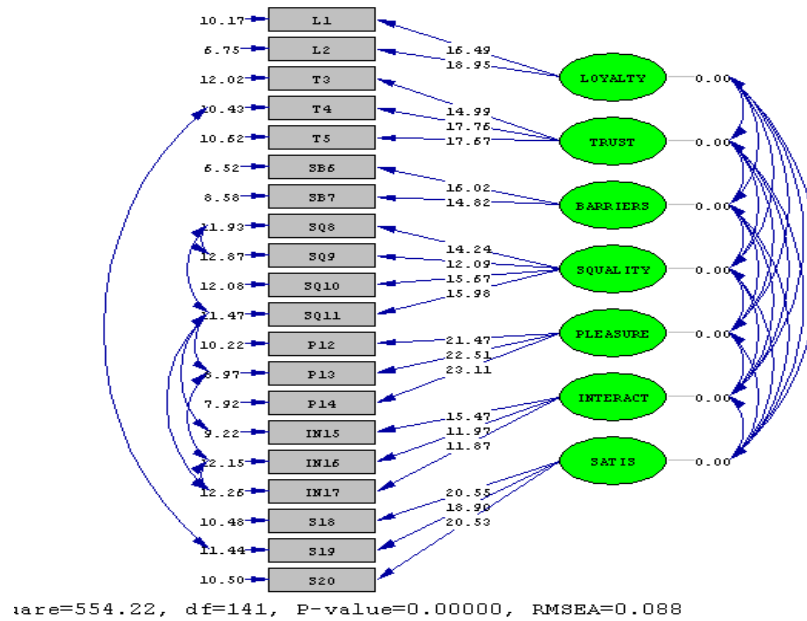


Fig. 2: Measurement model. with t-values.

Table 3: Structural parameter estimates.

| path | Hypothesis | Standardized coefficient | t-value | conclusion |
|------------------------------|------------|--------------------------|---------|------------|
| Satisfaction-loyalty | H1 | 0/28 | 3/34 | Supported |
| Trust-loyalty | H2 | 0/40 | 3/45 | Supported |
| Switching barrier- loyalty | H3 | 0/14 | 2/24 | Supported |
| Playfulness-satisfaction | H4 | 0/14 | 2/23 | Supported |
| Service quality-satisfaction | H5 | 0/44 | 4/42 | Supported |
| Service quality- trust | H6 | 0/67 | 14/42 | Supported |
| Intimacy- trust | H7 | 0/56 | 8/89 | Supported |

Path Diagrams play a fundamental role in structural modeling. Path diagrams are like flowcharts. They show variables interconnected with lines that are used to indicate causal flow. One can think of a path diagram as a device for showing which variables cause changes in other variables. Figure 3 shows structural modeling.

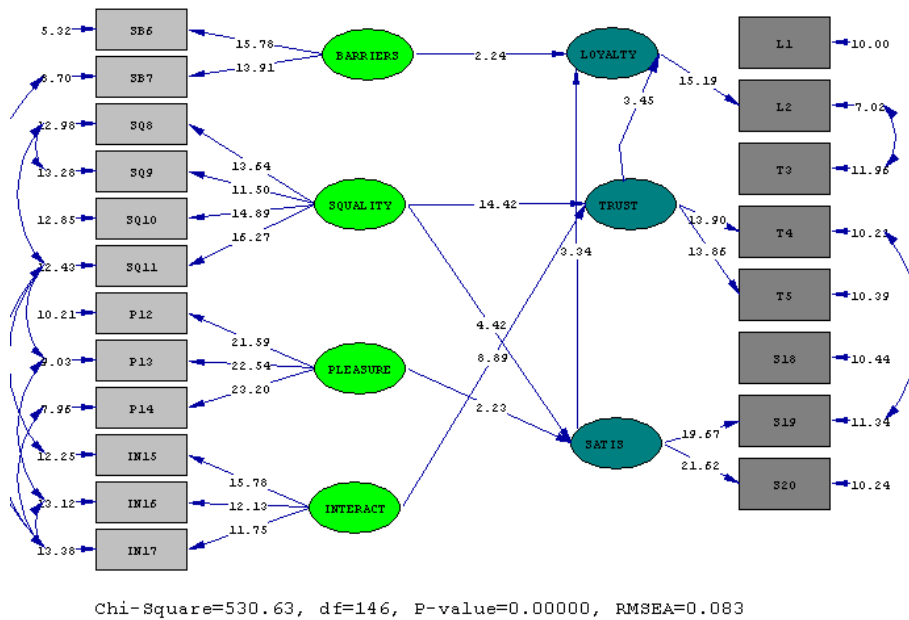


Fig. 3: Structural model with t-values.

Discussion:

In this research, a model that investigates the effects of satisfaction and trust and switching barriers on customer loyalty is tested in the context of mobile services in Irancell company. Both relational qualities, including satisfaction and trust, and switching barriers have significant effects on customer loyalty. In terms of antecedents, it is found that playfulness and service quality impact satisfaction while service quality and intimacy affect trust.

Implications for Research and Practice:

Customers stay with a service provider because they want to and/or they have to. In this research explores how satisfaction, trust and switching barriers service provider influence customer loyalty and factors such as satisfaction, trust and switching barriers have direct effect and playfulness, service quality and intimacy have indirect effect on customer loyalty.

Table 3 shows that the H1, H2, H3 support in this research so satisfaction, trust and switching barriers have a positive effect on customer loyalty. Good relationship quality makes customers want to stay with the current service provider while switching barriers make customers feel that they have to stay. When all three are presented in a model, all three have demonstrated significant effects on customer loyalty. Companies should look into methods that enhance customer satisfaction, build customer trust, and make switching harder.

Also table 3 shows that H4, H5, H6, H7 support in this research so playfulness and service quality have a positive effect on satisfaction and also service quality and intimacy have a positive effect on trust. Service quality is found to be an important factor to both satisfaction and trust in this study. It is still true in mobile services that improving service quality brings the benefits of increased customer satisfaction and trust. Service providers should really consider ways to improve their services in order to maintain the basic strength to compete. In the past, playfulness has rarely been included in research on customer loyalty of mainly utilitarian services, such as a mobile device. However, more and more entertainment features have been added, meaning that these services now contain both utilitarian and hedonic values. The finding that playfulness affects satisfaction and there was no significance difference between the influence of playfulness and service quality on satisfaction suggests that it cannot be ignored. Playfulness offers another avenue for increasing customer satisfaction. Irancell can provide more value-added options with entertainment to differentiate themselves from other providers with standard services.

In addition to service quality, intimacy is also a significant factor to trust. That means, customers trust service providers more and remain loyal if they feel intimate with the company. Companies can cultivate intimacy with customers to increase customer trust and enhance customer loyalty.

In sum, for companies in a highly competitive market, the better strategy is to provide high service quality and to implement methods aiming to provide added value to customers, such as intimacy or playfulness in mobile services. Switching barriers are still a viable technique to prevent customer defection, but companies should not count on it as the sole strategy to retain customers.

Limitations and Future Research:

Several limitations of the study should be noted. First, The major limitation of this study is the potential for common source biases, which is a normal concern for studies using one questionnaire.

Second, some important factors are not integrated into the model. For example, possible factors which may significantly influence customer loyalty include corporate image,

Third, one of the strengths of the study can also be considered a limitation. The model is tested in Iranian telecommunications setting in which cultural and economic factors are embedded. Therefore, the findings may not be fully applicable in other settings.

It is possible that the needs of the two groups of users may be different given their different technologies. In the future, comparison of the two groups will enable a better understanding of consumer behavior in mobile services. Furthermore, the integrated model with both pull-in and push-back forces can be applied to contexts with other characteristics to study the relative strength of both drivers.

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Appendix

List of items in the final questionnaire:

Loyalty

- 1- I intend to stay with the carrier.
- 2- I intend to recommend the carrier to others.

Satisfaction

- 1- How satisfied are you with your mobile service provider?
- 2- How satisfied are you with the relationship with your mobile service provider?
- 3- Overall, I am satisfied with my mobile service provider.

Trust

- 1- My mobile service provider can be relied upon to keep promises.
- 2- My mobile service provider is trustworthy.
- 3- I have full confidence in my mobile service provider.

Switching barriers

- 1- Switching to other providers will bring economic loss.
- 2- Switching to other provider will bring psychological burden.

Service quality

- 1- Overall, I'd say the quality of my interaction with the provider's employees is excellent.
- 2- I would say that the quality of my interaction with the provider's employees is high.
- 3- I always have an excellent experience when I interact with my service provider.
- 4- I feel good about what my service provider provides to its customers.

Playfulness

- 1- Using mobile services gives enjoyment to me.
- 2- Using mobile services is fun for me.
- 3- Using mobile services keeps me happy.

Intimacy

- 1- My mobile service provider cares for its customers.
- 2- I like to communicate with my mobile service provider.
- 3- I feel intimacy toward my mobile service provider.