Recognizing the Effective Factors on Selecting the Adsl Services Provided By the Telecommunication Company

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A R T I C L E  I N F O

Article history:
Received 15 April 2014
Received in revised form 22 May 2014
Accepted 25 May 2014
Available online 15 June 2014

Key words:
ADSL, high speed internet, ADSL service provider, selecting the service provider company

A B S T R A C T

Modern communication equipment and technology considered as the infrastructure of life and its activities. So, the visual world is forming and developing. Here, the role of companies and organizations which provide communication services has become more significant. As a result, the companies involved in communication technologies have to have a specific look at the communication needs and demands of people. The present research aims at recognizing the effective factors on selecting the ADSL services provided by the telecommunication company in 2014. The population of the research incubates all the people who referred to the telecommunication company for purchasing high speed internet services and participants of the study are 286 of them. In order to collect the field data, the researcher developed a questionnaire applying the tests such as Friedman ranking test, regression and factor analysis tests to be analyzed. The results of the study indicated that the hypotheses related to archetype, geographical area, cost, performance, variability and supporting were confirmed. The hypotheses related to brand fame; advertisement, technical infrastructure monopoly, testing and the number and points of selling were rejected. It means that, the confirmed components had significant effect on selecting the ADSL service provider.

INTRODUCTION

Statement of the Problem: Decision making is one of the features of management and each management makes many decisions during his work life. Some of these decisions are not so important but some others have higher significance. Most of the decisions by the management are affected by qualitative and quantitative factors which are generally in contrast. Today, the marketers face a difficult challenge since marketing has changed to a higher significance. Most of the decisions by the management are affected by qualitative and quantitative factors [1]. Nowadays, the research field of marketing has gone beyond the conceptual and practical difference of two completely separate researches of market and marketing [2]. No doubt, the competitive wind of today between the service companies of the country will change to the future competitive thunder. A great part of the future for the companies is related to the present condition of them.

Today, marketing and marketing research has involved from the primary form to an organizational task which considers the competitive aim and customer satisfaction so that most of the successful companies of the world tried to reduce the costs and increase the efficiency. This is not possible without having a correct understanding of modern marketing and finally the market research with practical view and internet access [4].

In developing space of the country, the companies providing the data services (internet) face the increase of needs and demands from the users for high speed internet lines. This is due to fast growth and simultaneous development of the personal and social communicative needs. Here, the active companies in the field of providing ADSL services have significant role in the metropolitan city of Tehran due to existed potentials including the young population, cultural, scientific level and high income and also the focus of political, economic, social, cultural, international communication and academic activities.

The present research tries to answer the issue that what factors affect the selection of ADSL service provider companies by the customer in Tehran city and how more customers can be attracted to the companies.
The hypotheses related to Telecommunication Company:
1. Brand reputation of the telecommunication company affects the ADSL service selection by the customers.
2. Archetype of the telecommunication company affects the ADSL service selection by the customers.
3. Geographical extent of the telecommunication company affects the ADSL service selection by the customers.
4. Customer-orientation of the telecommunication company affects the ADSL service selection by the customers.

The related hypothesis to the ADSL service of the communication company:
1. ADSL performance of the telecommunication company affects the selection of the service by the customers.
2. ADSL support of the telecommunication company affects the selection of the service by the customers.
3. The selling points of ADSL of the telecommunication company affect the selection of the service by the customers.
4. High capacity of providing ADSL service of the telecommunication company affects the selection of the service by the customers.
5. Technical infrastructure dependency of the telecommunication company affects the selection of the service by the customers.
6. ADSL advertisements of the telecommunication company affect the selection of the service by the customers.
7. ADSL cost of the telecommunication company affects the selection of the service by the customers.
8. ADSL diversity of the telecommunication company affects the selection of the service by the customers.
9. ADSL test of the telecommunication company affects the selection of the service by the customers.

Population and Sampling Method:
The population of the present research include the subscribers of the high speed internet service of the telecommunication company in Tehran and having access to them is possible through ADSL selling centers of telecommunication company (all the telephone centers). The clustering sampling method has been used in this study. Each of the telecommunication regions were considered as a cluster and customers were randomly selected from among them. The research is done in a 6-month time period. The telephone centers (or selling ADSL) are placed in Tehran.

Background:
The article by Annemijn from Ryerson university, Toronto, Canada, at postdoctoral level titled as “the effect of facilities and services based on competition in providing the internet services in wideband market of Canada” [1]. This research studies the effect of competition on wideband internet service provider as an incentive for providing the modern services in response to increasing needs of customers for quality and high speed. The study introduces Canada as the global pioneer of wideband services which is the first provider of wideband service for the home customers on cable. The article provides its investigation of the present condition of wideband services considering the cost, speed and quality of the service and it is found that competition based on service and competition based on facilities in wideband market of Canada due to modern development in internet services. It is seen that competition based on service provides the best alternative and a tool for developing the wideband infrastructures. This is possible by applying the facilities and encouraging the investing on extra facilities. This article concluded that competition in Canada based on facilities is not real.

Following, it is added that this innovation has become a goal for government and most of people believe that innovation comes out of competition. In addition, based on the recent study of Berkman Center about internet and society (2009), it is found that there is relationship between wholesale access and high speed access and low costs.

In other research about the mix effectiveness of the marketing on brand equity and company image in the IT sector, the mix of factors were studied including performance, distribution channels, value-based pricing and service after sales. In this study it was shown that the mix performance of the marketing is positively related to brand value and company image moderates the effect of mix marketing on brand equity [7]. The article of Keng-Boon Ooi and colleagues from the business and marketing college of Abdulrahman University of Malaysia as “recognizing the effective factors on attitudes of customers in selecting and applying the wideband internet services” [6]. The aim of this research is to study the different norms, attitude and controlling factors effective on attitudes of customer in selecting the wideband internet in developing countries such as Malaysia. This article is written based on experimental data using a self-report questionnaire related to normal, incentive and controlling variables. Structure analysis of the model construct (experiment) is based on the effect of various variables on consuming attitudes of the customer in selecting and applying the wideband internet test in Malaysia. The results of the research revealed that the primary influence (PI), relative advantage (RA), hedonic
outcomes (HO), Facilitating the condition of resources (FCR), and self-efficacy (SE) were positively related to the behavior intention (BI) of the customer in selecting the wideband internet in Malaysia.

Many models have been proposed to explain shopping behavior which can be divided into three major categories. The first category includes task models and behavior as related to economic incentives. The second set of models is non-functional affected by Human factors and third category is complex subscription models that explain Shopping networks and models of decision making process. The most important of these models are mentioned below.

**IPO Model:**

Buyer behavior against the physical and psychological reactions of buyers depends on marketing activities as well as to the current environment model. Purchase refers to decision process of people to eliminate the need to purchase those goods and services as well as determining the evaluation and selection of suppliers.

in the following figure, marketing and environmental models include as mix of marketing which has four variables od product, price, distribution and promotion channel and in environmental model social, technological, economic , political and legal factors are involved. The black box of the buyer includes the features of buyer such as development of performance and establishing place. Decision making process of buyer includes how the buyer decides about performing and finally results in purchase [8].

**Anderson and Chambers Model:**

This model is known as the measuring- reward model. Based on this model, environment affects the behavior of the customers. So, this model tries to analyze the effect of people incentives on decision making and is based on the expectation theory that personal incentive is a function of personal expectation from his behavior and the result of behavior. Incentive factors and personal satisfaction are affected by the internal and external awards. Internal awards are determined by the person while the external awards are measured through organizational performance. The role of people in organization is influenced by the measuring criterion of people performance and how they are consistent with the views and expectation of a person.

So, marketers can have a true understanding of purchase and decision making process [5].

**D) Shoferi and Lilian Model:**

This model is related to group decision making process. In this model, environmental variables are defined as obligatory factors. Four decision making methods exist for selecting people. In Probability weight model, the weights show the power of each person for purchase. In Fitness model all individuals have equal weight. In Consensus model the process continues until all participants agree on the purchase.

In Acceptance model someone is selected who has the least odds with the preferences of the elected members.

**E) Sheath Model:**

This model focuses on the complex relationships such as shared decision making and factors that determine people's expectations. These expectations are influenced by three factors.

The first factor includes precursor population, information resources, active research, , perceptual distortion and satisfaction of purchase. The second factor is a process that involves the characteristic feature of the product and the company. The third factor is the conflict resolution approach that involves problem solving, persuasion and bargaining.

The fourth factor is a condition that affects the choice of a sudden purchase and includes a variety of brand choice related to the output [12].

**F) Howard- Sheath Models:**

This model attempts to explain how the specific data changes to behavioral responses in response to certain stimuli such as marketing stimuli through learning. This model is the updated version of a pervious systematic attempt to build an attitude and deep theory of decision-making process of consumers [13].

**Conceptual model of the research:**

The model is in two parts, each of which contains a set of selected variables designed as described earlier. At the first part, the variables measuring organizational factors are mentioned including brand reputation, geographic extent, archetype and customer-orientation.

In the second part, the Variable of the Telecom ADSL service functions is evaluated including: Prices, promotions, functionality, support, capacity assignment, Monopoly of technical infrastructure, testing and diversity.
Table 1: Multivariate Regression testing of multiple components of service and organizational factors on the preference of the ADSL Telecom service.

<table>
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<th>Dependent variable</th>
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<td>.36</td>
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<td>.12</td>
<td>.93</td>
<td>.58</td>
<td>.16</td>
<td>.2</td>
<td>.2</td>
<td>Archetype</td>
<td>Geographical extent</td>
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<td>.684</td>
<td>.01</td>
<td>.89</td>
<td>.48</td>
<td>.32</td>
<td>.2</td>
<td>.2</td>
<td>Customer-orientation</td>
<td>Performance</td>
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<td>.34</td>
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<td>Support</td>
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<td>.34</td>
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<td>.2</td>
<td>Capacity</td>
<td>Monopoly of infrastructure</td>
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<td>.16</td>
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<td>.1</td>
<td>Advertising</td>
<td>Cost</td>
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<td>.48</td>
<td>.56</td>
<td>.06</td>
<td>.46</td>
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<td>.2</td>
<td>Service variability</td>
<td>Practical test</td>
</tr>
<tr>
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<td>.644</td>
<td>.24</td>
<td>.37</td>
<td>.21</td>
<td>.3</td>
<td>.2</td>
<td>.2</td>
<td>Infrastructure</td>
<td>Provided by Telecommunication Company</td>
</tr>
</tbody>
</table>

**Testing Research Hypotheses:**

**Multivariate regression:**

In this section, we test the effect of simultaneous multiple regressions components of service and organizational factors of preferring the Telecom ADSL service.

The study of Simultaneous effect of variables shows that the components of antiquity, geographical extent, customer satisfaction, performance, support, pricing and variety of services have significant impacts on Telecom's ADSL service (p > .05).

The results show that the components of reputation, extensive areas of sales, capacity, infrastructure monopoly, advertising and Operational Testing does not have significant effect on preferred Telecom's ADSL service (p > .05).

Consequently, the first hypothesis that the brand reputation affects the Telecom ADSL service preferred by the customer is not confirmed (p < .05).

It is also hypothesized that the archetype of Telecom affects the selection of the ADSL service by customer is confirmed and direction of this relationship is negative (p < .05).

The third hypothesis test that the geographical extent affects the selection of ADSL service by the customer is confirmed (p < .05).

The fourth hypothesis is based on the customer's selection of Telecom's ADSL service is approved (p < .05).

**B) Hypotheses related to ADSL section of Telecom Company:**

The results of the fifth hypothesis test showed that ADSL performance of Telecommunication Company affects the selection of the service by the customer (P > .05). Moreover, testing the sixth hypothesis that supporting ADSL by the telecommunication company affects the selection of the service by the customer is confirmed (P < .05). The seventh hypothesis that the extent of the selling points of ADSL affects the selection by
the customers is not confirmed (P < 0.5). The results of the eighth hypothesis that high capacity of providing ADSL service affects the selection of this service by the customer is not confirmed, either (P< .05).

Testing the ninth hypothesis that monopoly of infrastructure affects the selection of ADSL service by the customer is not confirmed (P< .05). Testing the tenth hypothesis that ADSL advertisement affects selection of the service by the customer is not confirmed (P< .05).

The eleventh hypothesis that the cost of ADSL affects the selection of the service by the customer is confirmed (P < .05). The twelfth hypothesis that service diversity affects the selection of ADSL service by the customer is confirmed (P < .05). The thirteenth hypothesis that performance testing of ADSL services affects the selection of the service by the customer is not confirmed (P < .05).

Friedman test: ranking effective factors of preferring the Telecommunication Company Comparison of mean ranks (Table 4-31) shows that the price factor has the highest rank among other factors and the average is equal to 4.89.

Then the archetype factor has the average rating of 4.84. The last ranking among seven factors is related to the operating performance, with an average rating of 2.70.

Table 2: Friedman Test ranking factors influencing preference for Telecom ADSL service.

<table>
<thead>
<tr>
<th>components</th>
<th>Ranking average</th>
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<tbody>
<tr>
<td>1. cost</td>
<td>4.89</td>
</tr>
<tr>
<td>2. archetype</td>
<td>4.84</td>
</tr>
<tr>
<td>3. geographical extent</td>
<td>4.80</td>
</tr>
<tr>
<td>4. customer orientation</td>
<td>4.32</td>
</tr>
<tr>
<td>5. diversity</td>
<td>3.45</td>
</tr>
<tr>
<td>6. support</td>
<td>3.00</td>
</tr>
<tr>
<td>7. performance</td>
<td>2.70</td>
</tr>
</tbody>
</table>

Discussion and Research Suggestions:
According to the results, it is recommended:

Since the hypothesis one was not confirmed (not verified impact of brand reputation on Telecom ADSL service selected by the customer) it is proposed that telecommunications company plan to enhance its brand and positioning.

This has arisen due to the competitive environment in this area and is also important due to near competition of the Shuttle and ParsOnline service providers. Considering the confirmation of the effect of geographical extent on selecting the ADSL services, since the company is well known all over the city, it is suggested that the possibility of buying the service is provided all over the city.

It is suggested that the telecommunication company that since customer orientation is one of the most effective organizational factor on selecting the internet services, they try to strength their selling forces.

Considering that the service has been technical and a large number of applicants and clients may well not be familiar with and at various stages of its operation face problems, it is recommended as a competitive advantage of telecommunications company with a comprehensive program of support services to the educate the manpower requirements and develop its action. Due to the lack of effect of the approval of number (many) sale points on the choice of telecommunications services, it is suggested that in the field of Telecommunication with appropriate publicity to the notification of the several shopping centers. Due to the lack of confirmation of the impact of advertising enterprise selection and customer service and the description earlier in connection with the advertising appears contacts should revise its advertising policy.

According to approve the impact of ADSL service, price and variety in selection of contacts, and also considering the income range of customers in the Telecom Service and also taking into account the income of individuals which represents the average rate of downward revenue, it is proposed that the company improves its product development and production and its ability to compete to attract new customers and retain existing customers. Also, given that the service performance (speed and not stopping) greatest effect on the service selected by the customer it is anticipated that technical applications is required to enhance service performance. Also, due to the nature of the service and the importance of speed and not cutting the vast majority of customers, it is emphasized to maintain and enhance service performance.

Given that supports of ADSL service has a significant influence on the choice of telecommunications service and the buying process the step after purchasing the service is also very important.

REFERENCES