A New Model for Measuring Brand Equity in Service; Testing and Implementation of a Virtual University

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ABSTRACT: Today, businesses are in the world, including service providers, and the special place it is critical, brand equity is also a powerful tool in the marketing competition; therefore, it is important to manage and measure. In this article we try to influence various aspects of brand equity firms and service firms find and taking into consideration the different aspects of the products and services that are and also taking into consideration the different aspects of service businesses a range of services, the importance of education and e-learning and virtual at the level of higher education to provide a comprehensive model; then model in a virtual university test and implement. The data collected through questionnaires distributed among all faculty, students and staff of 1031 people was conducted MehrAlborz and 300 responses were received. Random sampling and sample size calculation was based on 280 kokoran formula. To ensure reliability, the cronbakh alpha was used to test the structural equation modeling was performed. The results of the test showed that the characteristics of the customer, only customer experience and psychological characteristics are the only marketing the brand awareness and in brand image, the perspective of symbolic features as well as features of your service provider MehrAlborz University, university of MehrAlborz influence on brand equity.

Keywords: Services, Branding services, Means a service, Service brand equity.

INTRODUCTION

Branding as the cornerstone of marketing services in the 21st century has been described (Berry, 2000). Due to the nature of the service characteristics such as intangibility, inseparability, and heterogeneity and corruptible, it is inferred that the concept of branding for service is more important than physical goods.

Often implied that the marketing in the service sector due to the unique characteristics of services, superior quality and experience of faith, rather than challenging and because it is difficult to evaluate the service before shopping for consumers so in general, the higher the risk drake to get a job.

Educational services as well as other professional services department who risk in these circumstances have an reducing the risk and provide greater certainty to consumers and increase confidence in the decision-making. Brand equity also helps to visualize and imagine the products, services the creation of brand management and brand equity in higher education also plays an important role in the marketing field.

Sphere of influence institution training managers must also measure the impact of each of the dimensions of brand equity in their own services this issue presents a comprehensive model this area, check the model of virtual university test and concluded MehrAlborz.
METHODOLOGY

Study of the nature and purpose of application and description of data collection which seeks to develop a model to measure brand equity in education and virtual learning.

Research questions

A) Components dimensions of the impact on brand equity services, in particular electronic services and virtual teaching and learning is?

B) The extent and severity of the impact of each of the components of brand equity in education and virtual learning effect is?

C) Three differentiated brand equity in the area of goods and services in the field of physical products is?

Field of research (Comprehensive statistical sample size, the time, location research). Comprehensive statistics include all teachers, students, and staff of 1031 people and MehrAlborz random sample size of 280 was calculated Cochran. Because there may not respond to a number of people, a questionnaire was sent to the entire community of 300 people responded. The research began in the winter of 2011 and was completed in winter 2012.

Data collection tools

And surveys conducted to gather information about the services and special education services, as well as brand equity, the first survey was conducted research and then a questionnaire-based surveys and data from the literature, designed and presented. The design of the questionnaire the five-option likert scale was used and for each of the dimensions listed in the model, the following specific question designed specifically to explain your answer.

Information analysis

To analysis the data, descriptive and inferential statistics were used. Analysis of data from the questionnaires was conducted using Lisrel software. In this study, not every time, only one independent variable and the dependent variable was analyzed, so the way we work which can simultaneously analyze multiple independent and dependent variables therefore, the analysis of multivariate analysis was performed based on the structural equation.

In this way, the relationship between the variables or indicators presented clearly (survey questions) and endogenous latent independent variables (scale model) analysis also the relationship between the latent exogenous variables (brand equity services) with endogenous variables (model dimensions) was analyzed.

The reliability and validity of the questionnaire

The questionnaire was based on previous research papers and a questionnaire was sent to 10 people, and they are experts in the field of marketing and offered their views on the reform was necessary. The face and content validity of the questionnaire enjoys.

Reliability based on Cronbach alpha was calculated. Alpha values obtained for the study 0.943, when this value is close to a number, so the test of reliability is very good.

Concepts, ideas, theoretical and research background

Most theoretical studies on brand equity from the customer's perspective in the first half of 1990 occurred following the most empirical research. Although a substantial body of research on the physical tangible goods marketers conduct branding activities; however, less research has been done in the area of services. Providing important services to the global economy. The lack of investment, more and more valuable (Charlene Davis, 2007).

Services

Gronroos serve as an activity or a series of activities, who are more or less intangible nature and interact with customers and staff and physical resources or goods or service provider system occurs as the solution to customer problems, are provided.

Services compared with heterogeneous goods, while goods are standardized and this difference has led to vary at any time the customer experience and assessment of quality of service is dependent on uncontrollable factors. Services are intangible in contrast to goods that is why the service can come in the form of inventory in the services can be demonstrated and communicated. Physical goods are consumed in production time and at another time, but at the sometime takes care of production and consumption.in other words, simultaneously, so it is difficult to mass production and customer service in exchange processes and services intervene company. Another difference is that the services of the goods are perishable, so they cannot be restored and re-sold.

Customer service does not serve the owner of the goods at the customer buys a product when its owner is (Bitner et al., 1997).
Branding services

Creation and management of a university are strong role in the higher education market. When branding products, the relationship between customer and product focus while the initial focus of the organization as they are (Berry, 2000). Services are essentially a promise of future experience of the nature of a service provider organization or individual. Companies active in the field of services through four methods are able to build strong and some companies together employ all four methods (Berry, 2000), which include.

A) Dare to be different: Dare to be different from the views Berry means that the service conscious and deliberate effort to be different. They are always a maverick and act independently and to satisfy the customer and make him and others to challenge the ways. Create a distinctive image for its customers, its brand and customer experience of the service provided, indicate and branding strategy and ultimate goal is that by offering different experiences serve to reinforce the (Berry, 2000).

B) Determine its reputation: Berry in 2000 concluded that companies with high brand equity in their service to any customer they serve better value of community service and they talk about their competitors, we have the knowledge and experience with the customer and the customer will stimulate and such companies over time, not only because it is controlled by signals generated due to the customer and because of word of mouth advertising that is done by the customers in the community, are well known.

C) The emotional connection: All customers are living in a world of economic and feeling influence on their decisions. Great brands of products that have specific characteristics and value are superior and their influence on people is emotion.

D) Internal brand building: Within the meaning of the brand, including features such as research and offered to share their strategies with staff, training staff to strengthen the brand, reward and celebrate the staff for their work to support those who have and also as well as to protect and foster the involvement of employees are considered. Inside the building is a continuous process and is in progress; as you are making an ongoing process by the customer.

Services cape

The physical environment has an important role in terms of positive and negative plays in shaping a sense of customer service scape (Bitner et al., 1997). Knowing the emotional and cognitive effects will be of great help for design service scape and to help service providers to design an efficient and pleasant and the environment should be consistent with customer expectations. The online learning environment, students can common elements of the physical environment as indicator of their services. Here students on other variables, such as the beautiful integration and use of e-scape.

Brand equity services

Higher education institutions that are meant to be something of a student of the institution perceived attributes are defined interprets and the affective and cognitive elements are formed in the field of higher education consist of three dimensions:

A) Brand strength: what are the institutions is strong.

B) Brand favorability: what are the most important and valuable institution.

C) Brand uniqueness: based on how they are distinct institution (Martinez & De Chernatony, 2004).

Brand equity services

De Chernatony and McDonald in 1998, brand equity has been considered a multidimensional concept. Brand equity is a complex concept that may be applicable to a variety of concepts in literature “Bling people and the elephant syndrome”.

Berry differences impact brand awareness and brand equity in services means that customer response to marketing their brand, combined defined. A basic premise of brand equity is proven brand equity; brand strength is the customer experience is learned over time about the brand.

Of these three areas, brand equity from the customer’s perspective, has attracted more attention in research. Measuring brand equity will depend on various consideration of different nature, requires different dimensions. In this article we measure brand equity in terms of customer services look.

Model Array

In this paper, the models for the study of band equity the conceptual model for measuring brand equity in education and virtual learning services offered and the 10 experts were held. His comments about the various aspects of the model, then the final model was developed to test. Brand equity model of Berry in 2000, has six major components which includes the presentation of their organization, their external communications, customer experience agency, brand awareness, brand and brand equity is meaningful.
In 2009, Kieran Clarke pyramid model Keeler intensified brand equity in accordance with the provision of higher education. In 2011 Mourad et al presented the conceptual model of brand equity in higher education, the model consists of four main components to customer specifications, features, brand awareness, brand image and brand equity are the features.

According to the models, and the offers are experts in the field of services, features there main customer, brand awareness and brand image in the field of higher education of important to measure bran equity the primary and comprehensive model for the study of the form (1) are presented.

A) Customer specifications: his experience includes social features and services are acquired by the customer experience compared to its competitors, it is helpful and pleasant experiences and psychological characteristics of the client, such as emotions, motivation, and type of thinking wills she is correct.

B) Brand awareness: including marketing and media information that will create awareness of customer service. Marketing activities include all marketing communications activities aimed at encouraging and informing internal and external marketing is done and done such as advertising, public relations, publicity and word of mouth. The brand awareness including media type that uses a service provider as well.

C) Brand image: including the characteristics of services, features, services, features and symbolic point of view services. Features elements such as fees for services provided, the quality perception of services, features virtual classrooms and presence, features educational content offered, the availability of courses and after graduation in the model involved. Features include internal and external communications service provider, the time and place of the service provider, a record of reliability, personnel service provider and the educational and non-educational services. Landscape features include symbolic links with brand identity, social image, positioning, reputation, leadership, the facilities updated, in-person classes and exams as well as physical environment includes features designed educational web portal. In this model, are significant elements; brand power, brand desirability and uniqueness of their brand equity are pointers to structures.
RESULTS

Measurement model or CFA: First, we determine whether the selected indicators to measure the accuracy of the necessary structures and structures research how the indicators are selected to align them. In this study we first have to prove that the measurement model is appropriate or not? For this purpose, the indices of the model have p-value is the
most important index. If the value of the index of error of less than or equal to 0.05 or 0.95 confidence level means that our data do not confirm the model and if the value of 0.05, is larger, which means that data confirmed the model and the whole model is approved. In this study, the p-value is calculated as 0.05 <0.07010, so this result is that data have confirmed the model and the whole model is approved. The result of the calculation of the other indicators in table 1 is given.

Table 1. The results of the analysis of the model parameters.

<table>
<thead>
<tr>
<th>Index</th>
<th>Satisfactory</th>
<th>Reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicators of degrees of freedom df</td>
<td>$x^2$</td>
<td>Less than 3</td>
</tr>
<tr>
<td>second $x^2$</td>
<td>$\frac{x^2}{df}$</td>
<td></td>
</tr>
<tr>
<td>Significant level</td>
<td>P-Value</td>
<td>More than 0.05</td>
</tr>
<tr>
<td>Of mean square error model</td>
<td>RMSEA</td>
<td>Less than 0.08</td>
</tr>
<tr>
<td>The square root of the mean squared residuals</td>
<td>RMR</td>
<td>Close the zero</td>
</tr>
<tr>
<td>Index compliance</td>
<td>GFI</td>
<td>More than 0.9</td>
</tr>
<tr>
<td>Index values softened fitness</td>
<td>NFI</td>
<td>More than 0.9</td>
</tr>
<tr>
<td>Not soft indicators fitness</td>
<td>NNFI</td>
<td>More than 0.9</td>
</tr>
<tr>
<td>Increasing fitness index</td>
<td>IFI</td>
<td>More than 0.9</td>
</tr>
<tr>
<td>Adaptive fitness index</td>
<td>CFI</td>
<td>More than 0.9</td>
</tr>
</tbody>
</table>

The results show that the model is good value, in other words, the data structures are no good alignment. Check significant factor loadings variable measurement model using path analysis: If loadings in the confirmatory factor analysis each marker with desired structures which have of is greater than 1.96; in that case, we can say that the error rate of 0.05 or 0.95 confidence level indicator to measure the accuracy of the structure or property is hidden and the impact. Subject to the above and the structural model in significant coefficients and according to figure (2), the size of impact on brand equity services MehrAlborz University marked.
Based on the table (2) a recent study found that the first question. Marketing activities, the symbolic character and landscape services, features, services, customer experience and psychological characteristics affect the brand equity of the MehrAlborz University (table2).

**Table 2.** Significant relationship and influence of brand equity models in the mehrAlborz university services.

<table>
<thead>
<tr>
<th>Dimensions (endogenous latent variables)</th>
<th>Load factor(t)</th>
<th>The effect on the brand equity of the university</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing activities</td>
<td>2.56</td>
<td>Yes</td>
</tr>
<tr>
<td>Media</td>
<td>0.99</td>
<td>No</td>
</tr>
<tr>
<td>Properties services</td>
<td>1.85</td>
<td>No</td>
</tr>
<tr>
<td>Symbolic landscape features and services</td>
<td>2.85</td>
<td>Yes</td>
</tr>
<tr>
<td>Features of the service provider</td>
<td>2.34</td>
<td>Yes</td>
</tr>
<tr>
<td>Customer experience</td>
<td>1.98</td>
<td>Yes</td>
</tr>
<tr>
<td>Psychological characteristics of clients</td>
<td>2.05</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Evaluate the effectiveness of the brand equity of the university of MehrAlborz using standard estimates: The time factor is hidden between the independent variables (brand equity services) is higher, the impact is, therefore, based on the table3 the impact of the size and components of the brand equity of the university of MehrAlborz from the highest to the lowest, are presented.
Table 3. Examine the impact of the brand equity of the university MehrAlborz.

<table>
<thead>
<tr>
<th>Dimensions (endogenous latent variables)</th>
<th>The impact</th>
<th>Home</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symbolic landscape features and services</td>
<td>0.96</td>
<td>Brand image</td>
</tr>
<tr>
<td>Marketing activities</td>
<td>0.92</td>
<td>Brand awareness</td>
</tr>
<tr>
<td>Features of the service provider</td>
<td>0.89</td>
<td>Brand image</td>
</tr>
<tr>
<td>Psychological characteristics of clients</td>
<td>0.86</td>
<td>Customer specifications</td>
</tr>
<tr>
<td>Customer experience</td>
<td>0.82</td>
<td>Customer specifications</td>
</tr>
</tbody>
</table>

Therefore, according to the table3 answer the second question of the study, the severity of the impact on brand equity services also showed MehrAlborz University.

CONCLUSION

Based on the results of the model have been standard can be concluded that the best strategy to increase brand equity management services MehrAlborz university is on those factors that strongly influence by investments in brand equity more. Therefore, management need to create a better image of the brand service, the symbolic character and landscape services will have to invest more and to create brand awareness MehrAlborz university, to develop marketing activities. Managers should have a greater focus on our customer's psychological characteristics.
There are means includes power utility and uniqueness of their brand. According to the standard model in the form of estimates of the coefficients for the brand, brand desirability and uniqueness are respectively 0.90-0.94-0.97, it can be concluded that all these factors have weighed close for one, but the desirability of the brand, then the brand and the uniqueness of their brand as a predictor of outcome. The utility and power are more effective in branding for the University of MehrAlborz as a virtual university in the field of higher education, non-governmental. The model of this research gap between the weight of their power factor, utility and uniqueness of their brand, but the way in terms of rankings, utility and power are the priority.

The conclusion of this study is to answer the third question, the characteristics, of measuring brand equity and brand equity in the goods and services in physical products. Perceptual quality services in a more difficult commodity, because the customer experience of service is difficult because services are produced and consumed at the same time customers can also experience some of the services even after consumption, and therefore cannot be less judgmental about them. The service, staff, customers and quality as the most important determining factor for cognitive experience.

In the field of services as a service provider organization to focus more on their properties because staff dealing with customers and clients involved in the production and consumption of services is, therefore, “the organization offers” of important. For example, customer satisfaction services to employees depends on the satisfaction of goods depends more on the characteristics of the goods. What are the most significant impact on the service, the customer experience of the organization, but if their external communications such as advertising and word of mouth are more general ads that can have a significant band.

Considering the above measure brand equity in services than is goods brand equity measurement and physical products is more difficult.

Special service centers and higher education proposed in a virtual model of measuring the brand equity of its services and components to consider in accordance with the nature of the service area is also proposed utility, power and a unique brand as three prognostic factors have the brand equity of its services.

It is suggested that these iconic features and view their service as well as a great impact on strengthening brand equity will be services. A virtual university web portal can reinforce their training in this regard. The services offered can be controlled marketing activities such as the name and logo on proving institutional strengthening brand recognition and customer awareness to more tangible nature of their institution to be established. It is suggested that institution as a provider of services on its characteristics, more focused, and to have credibility, having a good process for the service, the personnel and the internal and external communication higher professors suitability greater axial.

For example, virtual universities, services provided, useful and unique and added value in learning experiences, solve problems and plan the work and work-study students and even professors and staff create.

Due to the large extent, especially in the field of branding and brand equity measurement service has suggested that the dimensions of the model presented in this study, to separate models are examined. It is also proposed models in the field of virtual universities, individually tested. Brand equity between universities and higher education institutions of government, semi-government Private and non-profit specified.

**REFERENCES**


