

The effective major factors on customer perceived value in service context: The application of ANFIS method

Abdollah Norouzi¹, Ali Akbar Jafarizadeh², Maryam Karbalaee¹, Yousef Najafi³

¹Department of Business Management, Science and Research Branch, Islamic Azad University, Tehran, Iran; ²Department of Accounting, Qeshm Branch, Islamic Azad University, Qeshm, Iran; ³Farhangian University, Nasibe Branch, Tehran, Iran

Received for publication: 29 April 2013.

Accepted for publication: 24 July 2013.

Abstract

The purpose of the research is to further explore the understanding of the major factors influencing on service customer perceived value by undertaking Adaptive Neuro-Fuzzy Inference System (ANFIS) method in fuzzy inference system (FIS). A total of 162 questionnaires were distributed to educational institute customers. In this research effective major factors on customer perceived value are brand image, company image, employee trust, company trust, service quality and costs. The results show that in the field of education, the company image and the costs are the most effective elements on the customer perceived value. Also employee trust and service quality have positive effects on the customer perceived value, but they were not very most. Thus educative services institutes must concentrate more on the company image and costs reduction in order to increase the customer perceived value.

Keywords: customer perceived value, brand image, company image, service quality, ANFIS method.

Introduction

One of the most important marketing strategies of the twenty-first century is to provide value to customers (Chen & Hu, 2010). Value creation has been a popular area in consumer and industrial marketing research and the interest is equally extensive in academia and industry (Heinonen, 2004). Creating and delivering customer value is seen as a corner-

stone of marketing and competitive strategy and relationship management (Berghman, Matthyssens & Vandenbempt, 2006) and understanding a customer's value position is an important management tool for improving customer service delivery (Olaru, Purchase & Peterson, 2008).

In the context of global competition, offering the customer a product or service that has superior value is believed to be the best way to gain an advantage among competitors (Woodruff, 1997).

However, remarkably few firms have the knowledge and capability to actually assess value and gain an equitable return for the value they deliver to customers. In business markets, where knowledge of value is considered critical and can be thought of as the cornerstone of business market management. It is critical for organizations to understand their offerings and learn how they can be enhanced to provide value to their industrial customers. Organizations, therefore, need to understand what drivers create value for customers in order to build a competitive advantage (Lapierre, 2000). Customer value theory (Woodruff, 1997) stresses the importance of understanding customer perceptions of value-in-use and building the customer value hierarchy model. Suppliers are supposed to learn about customer value, create it and develop delivery processes. Yet, the value construct is complex and its use within the literature varies considerably (Olaru, Purchase & Peterson, 2008).

The purpose of the research is to further explore the understanding of the major factors influencing on service customer perceived value by undertaking

Corresponding author: Ali Akbar Jafarizadeh, Department of Accounting, Qeshm Branch, Islamic Azad University, Qeshm, Iran. E-mail: aa.jafarizadeh@yahoo.com.

Adaptive Neuro-Fuzzy Inference System (ANFIS) method in fuzzy inference system (FIS).

Previous research into customer value has emphasized on defining the value construct as well as on linking it to other constructs such as loyalty, satisfaction and repurchase behavior. For example Hansen, Samuelsen and Silseth (2008) in relation to customer perceived value in a B2B service industry setting indicated that Corporate reputation, information sharing, distributive fairness and flexibility are modeled as drivers of customer perceived value, whereas word-of-mouth (WOM) and search for alternatives (loyalty measures) represent the effects of customer perceived value. Results showed that corporate reputation had substantially stronger effect on customer perceived value than the other drivers measured and when the intrinsic nature of service performance is hard to evaluate, corporate reputation works as substantial shorthand for value. Finally, customers' perceptions of economic value increase their likelihood of recommending the supplier and reduce their tendency to seek information about alternatives. In other research Roig *et al.* (2006), found that Perceived value was a multidimensional construct composed of six dimensions: functional value of the establishment, functional value of the personnel; functional value of the service; functional value price; emotional value; and social value. Cretu and Brodie (2007) show that company reputation, product or service perceived quality and prices and costs had a influence on perceptions of customer value. This research confirmed that the brand's image has a more specific influence on the customers' perceptions of the quality while the company's reputation has a broader influence on perceptions of customer value and customer loyalty. Brodie, Whittome and Brush (2009) point out that the aspects of service brand (brand image, company image, employee trust) plus service quality and costs had a effect on customer perceived value in services context.

Literature review and research hypothesis

Customer perceived value

Perceived value, the essential result of marketing activities, is therefore seen to be an element of the first order within relationship marketing (Roig *et al.*, 2006). Delivering superior value to customers is indisputably a main task for service firms in today's competitive marketplace (Hansen, Samu-

elsen & Silseth, 2008) because higher customer value increases customer satisfaction; thereby instilling customer loyalty; which, in turn, creates higher profit due to increased volume resulting from repeat purchases and positive word-of-mouth (Liu, Petruzzini & Sudharshan, 2007).

Typically, most definitions and conceptualizations focus on the economic worth of tangible outcomes. For example, one view is that value is the economic worth of a bundle of physical goods and services that is exchanged for some price (Hansen, Samuelsen & Silseth, 2008). Ulaga and Eggert (2006) maintain the trade-off notion, but they stress the multifaceted nature of the benefits and sacrifices in this trade-off, shifting the focus away from tangibles to some extent. As a contrast, Wilson (1995) defines value in a relationship as the outcomes that result from a collaborative relationship that enhance the competitive abilities of the partners.

As such, drawing on Newman's (1988) work value is defined as the benefits received by the customer divided by the resources sacrificed to acquire them. Formally, the conceptualization can be portrayed as in Eq. (1),

$$CPV = \frac{\sum_{i=1}^n B_i}{\sum_{i=1}^n S_i} \quad (1)$$

where CPV is a function of the total sum of benefits (B) received divided by the total sum of sacrifices (S) made by the customer to receive the benefits. Ulaga (2003) indicated while the marketing literature contains a variety of definitions stressing different aspects of the concept, four recurring characteristics can be identified: (1) Customer value is a subjective concept (2) it is conceptualized as a trade-off between benefits and sacrifices (3) benefits and sacrifices can be multifaceted and (4) value perceptions are relative to competition (Ulaga, 2003). In short, customer value is generally defined as the trade-off between the benefits ("what you get") and the sacrifices ("what you give") in a market exchange (Zeithaml, 1988). Roig *et al.* (2006) point out two important characteristics are in customer value. First, it is inherent to the use of the product, which differentiates it from personal or organizational values. Second, it is perceived by customers, and cannot be determined objectively by the seller. Only the customer is able to perceive whether or not a product or service offers value. At a general level, perceived value is defined as a judgement or a valu-

ation by the customer of the comparison between the benefits or utility obtained from a product, service or relationship, and the perceived sacrifices or costs. Customer value has two dimensions (a) the total value of goods and services and (b) the relationship value, which is composed of direct and indirect functions of a customer relation (Berghman, Matthyssens & Vandembemt, 2006). An overview of customer value theory also, suggests that consumers can perceive value from the rational and the experiential perspectives (Chen & Quester, 2009).

Effective factors

The model of research indicated in figure 1. In this research effective major factors on customer perceived value are brand image, company image, employee trust, company trust, service quality and costs.

Brand image

Keller (1993) defined brand image as “percep-

tions about a brand as reflected by the brand association held in consumer memory”. Basically, brand image describes the consumer’s thoughts and feelings towards the brand (Roy and Banerjee, 2007). In other words, brand image is the overall mental image that consumers have of a brand, and its uniqueness in comparison to the other brands (Faircloth, 2005). Brand image is important because it contributes to the consumer’s deciding whether or not the brand is the one for him/her and it influences consumers’ subsequent buying behavior (Bian & Moutinho, 2011). Keller’s (1993) customer brand equity model suggests that brand image is a key driver in eliciting the attributes, benefits, and attitudes towards the brand. Brodie, Whittome and Brush (2009) indicate that the brand image influence customer value. Based on this reasoning, the following hypothesis is provided:

H1: Customer perception of brand image has positive influence on customer perceived value.

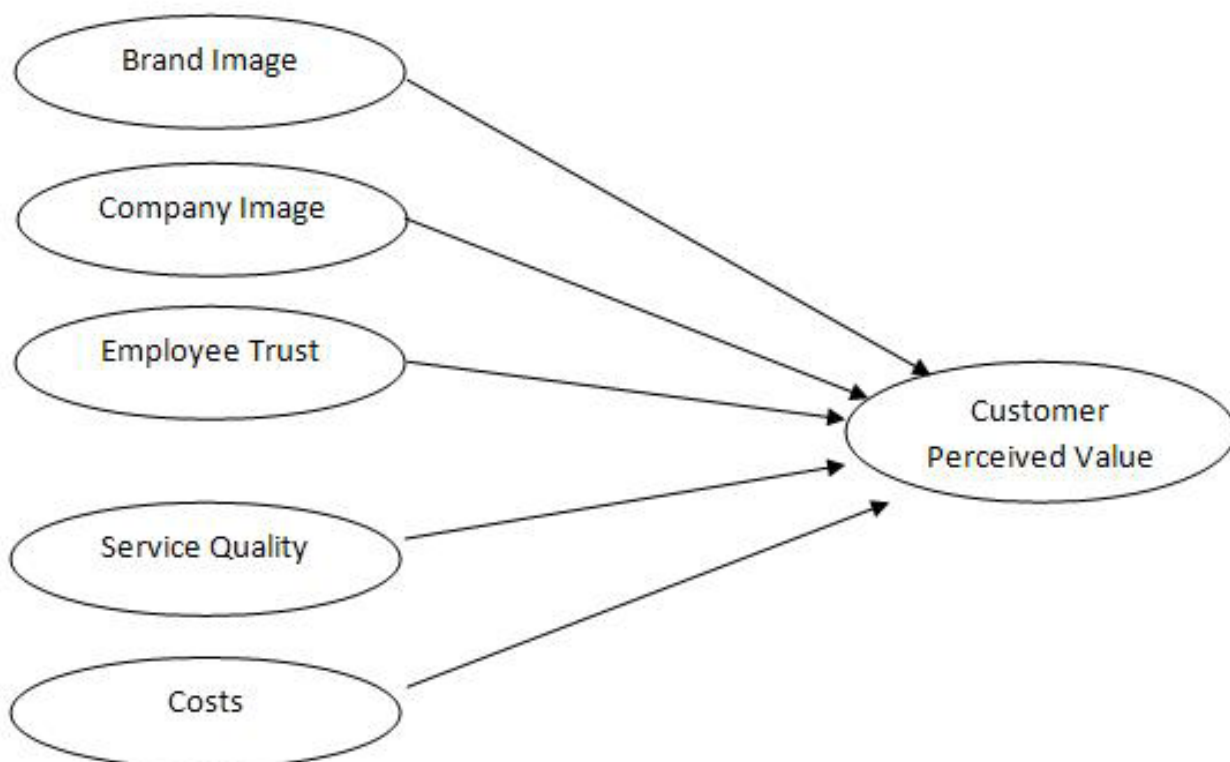


Figure 1. Research model.

Company Image

The corporate image is based on what people associate with the company or all the Information (perceptions, inferences, and beliefs) about it that

people hold (Martenson, 2007). In the management and marketing literature the terms corporate image, corporate reputation, company image and company reputation are sometimes used interchangeably

(Balmer, 2001). Whereas, others such as Fombrun (1996) see reputation as the esteem in a long-term perspective that the company has, as opposed to image that can be more short-term in nature (Martenson, 2007). A favourable corporate image can boost sales through increased customer satisfaction and loyalty (Pina *et al.*, 2006). Greyser (1999) identifies three general influences that the company's reputation can have on its customers. The first relates to differentiating customers' perceptions of the product and service quality, so it is similar to the influence of the brand's image. The second and third are broader influences on customers' perceptions of financial value and their loyalty to the company (Cretu & Brodie, 2007). Signaling theory provides a framework to explain the empirical link between company image and the customer value–loyalty process. Applying this theoretical view, the company's communications, which it develops to build its image for social responsibility and corporate capability, create a repository of credible information signals. Customers use these cues to ascertain the quality and value of the intangible service the firm provides (Brodie, Whittome and Brush, 2009). The following hypothesis is based on this reasoning:

H2: Customer perception of corporate image has positive influence on customer perceived value.

Employee trust

Trust is considered to be an important dimension in services marketing. Berry and Parasuraman (1991) assert that trust is a necessary condition in effective service marketing as the customer must buy a service prior to experiencing it. Additionally, customer perceptions of trust are linked to customer perceptions of quality (Iverson, McLeod & Erwin, 1996). Customer trust is more localized and experience based and reflects the customer's interactions with the company and employees in delivering the service experience. Hence it relates specifically to customers' experiences with the management policies and practices, and employee behavior (i.e. delivering the promises) (Brodie, Whittome and Brush, 2009). Sirdeshmukh, Singh and Sabol (2002) focus specifically on the influence of customers' trust on customer value and customer loyalty. For the clothing retailer they find employee trust influences customer value, while for the airline service they find trust in the company influences customer value. Based on these results and reasons, these hypotheses are expressed as followings:

H3: Customer trust in employee behavior has positive influence on customer perceived value.

Service quality and costs

During the past few decades, service quality has become a major area of attention to practitioners, managers, and researchers owing to its strong impact on business performance, lower costs, customer satisfaction, customer loyalty, and profitability (Nadiri, 2011). Service quality is an attribute extrinsically determined only by the customer (Walker, Johnson & Leonard, 2006). Based on Sweeney, Outar and Johnsons' (1997) model product quality and price perceptions, functional service quality and technical service quality perceptions both directly influence value perceptions (Seth, Deshmukh & Vrat, 2005). Marketing and delivering services and providing for service quality are important in creating value for customers (Groth & Dye, 1999). Perceptions of customer value can be viewed as a trade-off between perceived benefits (i.e. perceived product and services quality) and perceived sacrifices (i.e. prices and costs, both monetary and non-monetary) (Cretu & Brodie, 2007; Brodie, Whittome and Brush, 2009).

The following hypotheses are proposed:

H4: Customer perception of the service quality has a positive influence on customer perceived value.

H5: Customer perception of monetary and non-monetary cost has a negative influence on customer perceived value.

Methodology

Data collection

The field of the study covers the educational institute in Iran. First step is to collect the data related to the variables defining the theoretical model of the consumer behaviour proposed. In this sense, as has been done traditionally in Marketing Science in particular, and in Social Sciences in general, data is obtained by means of a questionnaire. This questionnaire gathers the measures for the set of constituent elements of the model. The subjects were 162 educational institute students in the Tehran area.

Measurements

Based on previous researches such as Brodie, Whittome and Brush (2009) and Cretu and Brodie (2007) brand image was measured using Aaker (1997). Company image was measured via adapted version of Logsdon and Wood (2002), Wartick (2002), and Whetten and Mackey (2002). The measurement scale for trust was Sirdeshmukh *et al.* (2002) scale that used in their airline travel study. Service quality was measured via adapted version of scale used by

Diamontopoulos and Winklhofer (2001, p. 271) and Brodie, Whittome and Brush (2009). For costs three items that form customers' perceptions of the monetary and non-monetary costs of the service offer are adapted from the airline study by Sirdeshmukh, Singh and Sabol (2002). The customer value measure the study uses represents customers' judgment about the trade-off between benefits (customer perception of the quality of the service features that determine the service offer) and costs (customer perception of the monetary and non-monetary cost of the service offer). Hence, consistent with previous research, a single item measure is used to assess the customers' overall judgment of "worth what paid for" (e.g., Bolton and Drew, 1991; Brodie, Whittome and Brush, 2009). Hence the questionnaire included 24 items to measure the six dimensions on a Semi-symmetric scale and ranged from "strongly disagree" (0) to "strongly agree" (100). Also, to ensure the respondents are making an overall judgment about customer value the following scale is used (0=extremely poor value and 100=extremely good value).

Data analysis method

In this research for data analysis use the ANFIS method. In this section, we will describe the ANFIS architecture and its learning algorithm for the Sugeno fuzzy model. For simplicity, we assume that the fuzzy inference system (FIS) under consideration has two inputs m and n and one output f . For a first-order Sugeno fuzzy model, a typical rule set with two fuzzy if-then rules can be expressed as:

Rule 1:

If (m is A_1) and (n is B_1) then $f_1 = p_1 m + q_1 n + r_1$

Rule 2:

If (m is A_2) and (n is B_2) then $f_2 = p_2 m + q_2 n + r_2$

Where p_1, p_2, q_1, q_2, r_1 and r_2 are linear parameters, and A_1, A_2, B_1 and B_2 are nonlinear parameters. The corresponding equivalent ANFIS architecture is as shown in Fig. 2. The entire system architecture consists of five layers, namely, a fuzzy layer, a product layer, a normalized layer, a defuzzy layer and a total output layer.

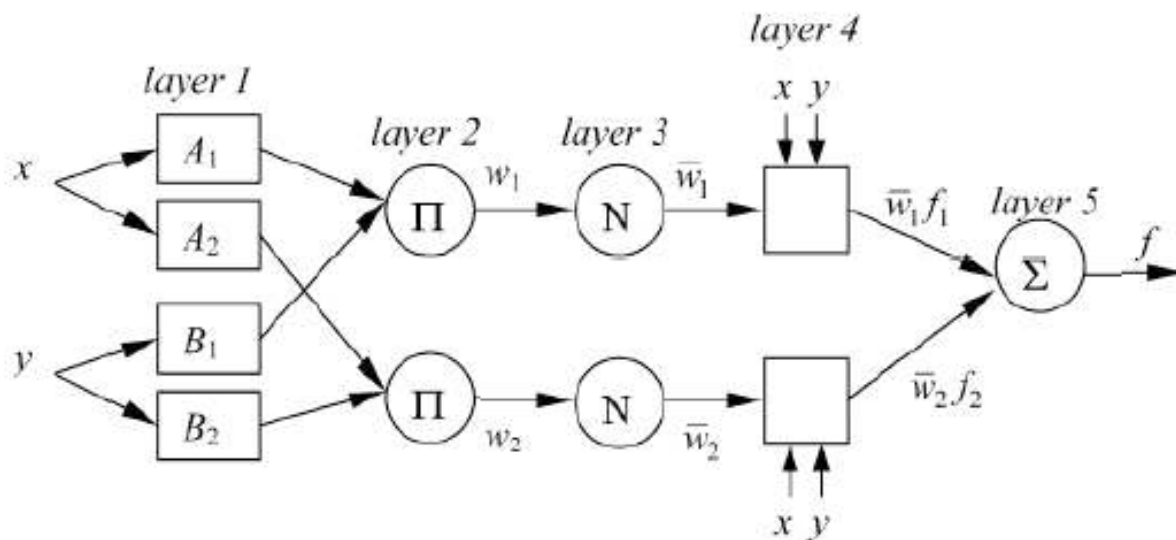


Figure 2. ANFIS architecture.

The following sections discuss the relationship between the output and input of each layer in the ANFIS. Layer 1 is the fuzzy layer, in which m and n are the input of nodes A_1, A_2, B_1 and B_2 , respectively. A_1, A_2, B_1 and B_2 are the linguistic labels used in the fuzzy theory for dividing the membership functions. The membership relationship between the output and input functions of this layer can be expressed as:

$$O_{1,i} = \mu_{A_i}(x) \quad i=1,2; \tag{2}$$

$$O_{1,j} = \mu_{B_j}(y) \quad j=1,2; \tag{3}$$

where $O_{1,i}$ and $O_{1,j}$ denote the output functions and μ_{A_i} and μ_{B_j} denote the membership functions. Layer 2 is the product layer that consists of two nodes labeled N . The output w_1 and w_2 are the weight functions of the next layer. The output of this layer is the product of the input signal, which is defined as follows:

$$O_{2,j} = \mu A_i(x) \mu B_i(y) \quad i=1,2; \quad (4)$$

Where $O_{2,j}$ denotes the output of Layer 2.

The third layer is the normalized layer, whose nodes are labeled N. Its function is to normalize the weight function in the following process:

$$O_{3,i} = \bar{w}_i = \frac{w_i}{w_1+w_2} \quad i=1,2 \quad (5)$$

Where $O_{3,i}$ denotes the Layer 3 output.

The fourth layer is the defuzzy layer, whose nodes are adaptive. The output equation is $w_i(p_i x + q_i y + r_i)$, where p_i , q_i and r_i denote the linear parameters or so-called consequent parameters of the node. The defuzzy relationship between the input and output of this layer can be defined as:

$$O_{4,i} = \bar{w}_i f_i = \bar{w}_i (p_i x + q_i y + r_i) \quad (6)$$

Where $O_{4,i}$ denotes the Layer 4 output. The fifth layer is the total output layer, whose node is labeled Σ .

The output of this layer is the total of the input signals, which represents the result. The results can be written as:

$$O_{5,i} = \sum f_i \bar{w}_i = \frac{\sum f_i w_i}{\sum w_i} \quad (7)$$

Where $O_{5,i}$ denotes the Layer 5 output (Li, Huang & Liu, 2007).

Results

To assess the acquired data using ANFIS method, the brand image was considered as input number 1, company image as 2, employee trust as 3, service quality as 4 and costs as 5. Finally the output is the customer perceived value. The input variables have 5 membership functions in a triangular shape which have resulted in production of 3125 fuzzy rules in ANFIS.

The reported error in Train FIS is 0.003838. The ANFIS structural model is shown in the figure 3.

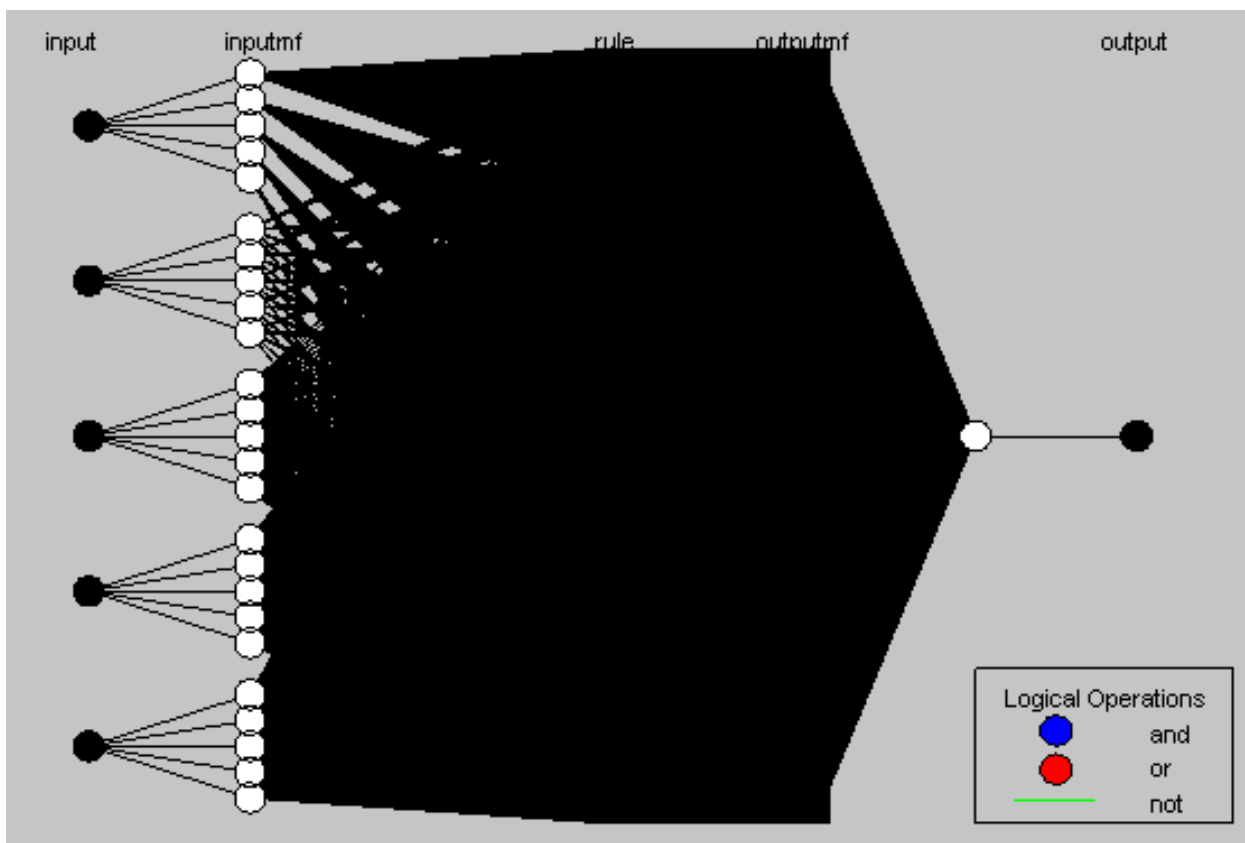


Figure 3. ANFIS structure model.

The output variable is shown zero when the input ones are at their minimum which is [40 28 35 36

100] while at their maximum [100 96 100 100 40], the output value is 95.6.

To test the hypothesis, all of the input variables, except the one which is involved in the hypothesis, are kept constant and the effect of the changes of the value of the main input variable on the output variable was determined.

In the first hypothesis, when the input variables were [50 50 50 50 50], the output variable was shown as 44.5. Setting the first input (brand image) to 70 and keeping the other variables the same, the output value changed to 42.7, which shows that the brand image has no positive effect on the customer perceived value. Thus the first hypothesis was rejected.

Evaluating the second hypothesis, the output variable increased to 61.7 after changing the value of company image to 70 while keeping the rest as [50 70 50 50 50]. This meant there were positive effects of company image on the customer perceived value. Therefore, the second hypothesis was accepted.

When the input variables were set to [60 60 60 60 60] for the third hypothesis, the output value was 49.2. Changing the third variable (employee trust) and setting it to 80, while the rest of the variables

were the same, the output value was 51.5 which meant that the employee trust has positive effects on the customer perceived value. Despite the weakness of the effect, the third hypothesis was accepted.

To evaluate the fourth hypothesis, the service quality value was set to 70 and the rest were as [50 50 50 70 50]. This resulted in a change in the output value from 44.5 to 49.5 which proved the positive effects of service quality on the customer perceived value. So the fourth hypothesis was accepted.

Finally, by changing the value of costs to 70 and the rest as [50 50 50 50 70], the output value decreased to 15.1. Also by changing the variables as [60 60 60 60 50] the output value was 61.4. Both of the findings showed that the costs have negative effects on the customer perceived value. Thus, the fifth hypothesis was accepted.

According to the above-mentioned findings, the two variables of company image and costs have the most effects on the customer perceived value. The mentioned variables and their effects on the output variable are shown in the figure 4.

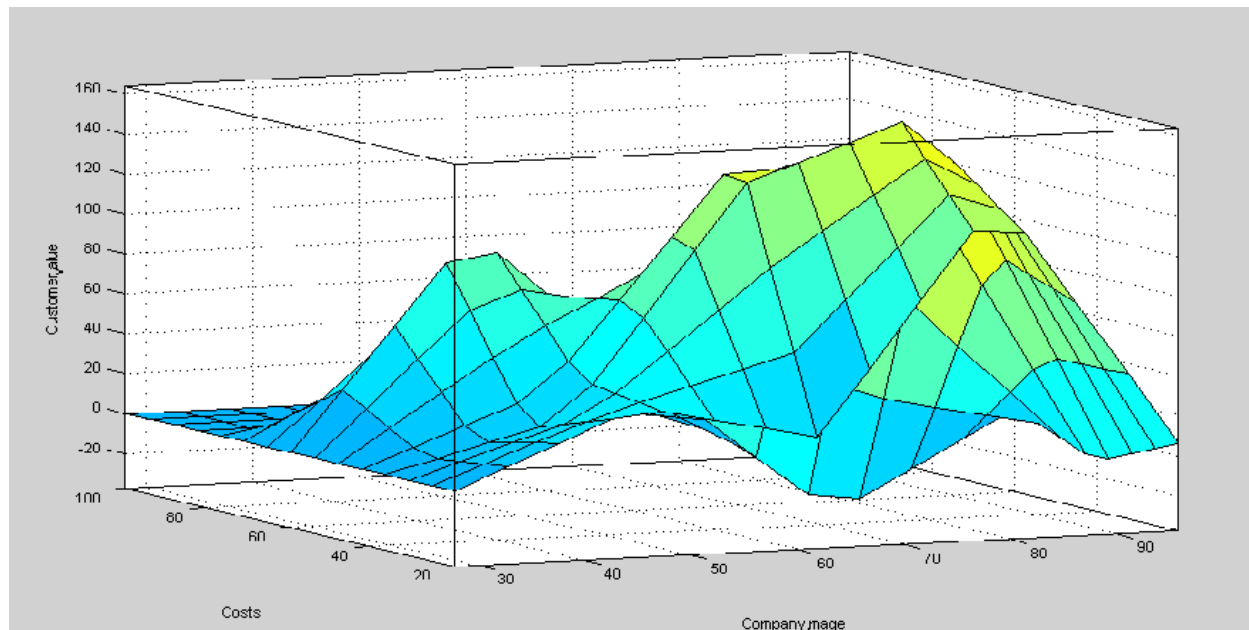


Figure 4. Model surface.

Discussion and conclusion

The results of the study are coherent with the findings of the previous research (such as Brodie, Whittom and Brush, 2009) except the first part. The results of that research show that the brand image by $b=0.18$, company image by $b=0.12$, employ-

ee trust by $b=0.17$, service quality by $b=0.30$ and the costs by $b=0.35$, ($p<0.1$) are effective on the customer perceived value.

The current study shows that in the field of education, the company image and the costs are the most effective elements on the customer perceived value. Also, employee trust and service quality have

positive effects on the customer perceived value, but they were not very most. According to this, the image of the individuals about the whole company is much more effective than their image of the brand. So, the educative services institutes must concentrate more on the company image and costs reduction in order to increase the customer perceived value, next they must go after the service quality improvement and employees trust increase. To achieve this, they can prioritize more of social responsibilities such as provision of education to low-income people, cooperation in educational and research events, facilitating work procedures and improvement of management.

One of the restrictions of this research is the consideration of only one type of service while collecting data which can be of some help by extending the results to other services. Also there was only one brand considered for collecting the data which can be another area of restriction. It is recommended that the research is performed on some other fields such as financial services and insurance, using the research variables, with various brands to obtain more credible results. Also to extend the results of this method, it is better to compare them with some other methods such as regression analysis.

References

- Aaker J., 1997. Dimensions of brand personality, *Journal of Marketing Research*, 34(3): 347-56.
- Balmer J.M.T., 2001. Corporate identity, corporate branding and corporate marketing-seeing through the fog, *European Journal of Marketing*, 35(3): 248-91.
- Berghman L., Matthyssens P. & Vandenbempt K., 2006. Building competences for new customer value creation: An exploratory study, *Industrial Marketing Management*, 35: 961-73.
- Berry L.L., & Parasuraman A., 1991. *Marketing services*. New York, The free press.
- Bian X., & Moutinho L., 2011. The role of brand image, Product involvement, and knowledge in explaining consumer purchase behaviour of counterfeits: Direction and indirection effects. *European Journal of Marketing*, 45(1/2): 191-216.
- Bolton R., & Drew J., 1991. A multistage model of customers' assessments of service quality and value. *Journal of Consumer Research*, 17 375-84.
- Brodie R.J., Whittome J.R.M., & Brush G.J., 2009. Investigating the service brand: A customer value perspective. *Journal of Business Research*, 62: 345-55.
- Chen P.T., & Hu H.H., 2010. How determinant attributes of service quality influence customer perceived value. *International Journal of Contemporary Hospitality Management*, 22(4): 535-51.
- Chen S.C., & Quester P.G., 2009. A value-based perspective of market orientation and customer service. *Journal of Retailing and Consumer Service*, 16: 197-206.
- Cretu A.E., & Brodie R.J., 2007. The influence of brand image and company reputation where manufacturers market to small firms: A customer value perspective. *Industrial Marketing Management*, 36: 230-40.
- Diamontopoulos A., & Winklhofer H.M., 2001. Construction with formative indicators: An alternative to scale development, *Journal of Marketing Research*, 38(2): 269-77.
- Faircloth J.B., 2005. Factors influencing nonprofit resource provider support decision: Applying the brand equity concept to nonprofit. *Journal of Marketing Practice and Theory*, 13(3): 1-15.
- Greyser S.A., 1999. Advancing and enhancing corporate reputation. *Corporate Communications*, 4(4): 177-81.
- Groth J.C., & Dye R.T., 1999. Service quality: Perceived value, expectations, short falls, and bonuses. *Managing Service Quality*, 9(4): 274-85.
- Hansen H., Samuelsen B.M., & Silseth P.R., 2008. Customer perceived value in B-t-B service relationship: Investigating the importance of corporate reputation. *Industrial Marketing Management*, 37, 206-17.
- Heinonen K., 2004. Reconceptualizing customer perceived value: The value of time and place. *Managing Service Quality*, 14(2/3): 205-15.
- Iverson R.D., McLeod C.S. and Erwin P.J., 1996. The role of employee commitment and trust in service relationship. *Marketing Intelligence & Planning*, 14(3): 36-44.
- Keller K.L., 1993. Conceptualizing, measuring, managing customer-based brand equity, *Journal of Marketing*, 57(1): 1-22.
- Lapierre J., 2000. Customer perceived value in industrial contexts, *Journal of Business & Industrial Marketing*, 15(2/3): 122-40.
- Li X.X., Huang H. and Liu C.H., 2007. The application of an ANFIS and BP neural method in vehicle shift decision, 12th IFToMM World

- Congress, France, June 18-21.
- Liu B.S., Petruzzi N.C., & Sudharshan D., 2007. A service effort allocation model for assessing customer lifetime value in service marketing. *Journal of Service Marketing*, 21(1): 24-35.
- Logsdon J., & Wood D., 2002. Reputation as an emerging construct in the business and society field. *Business and Society*, 41(4): 365-70.
- Martenson R., 2007. Corporate brand image, satisfaction and store loyalty: A study of the store as a brand, store brands and manufacturer brands. *Industrial Journal of Retail & Distribution Management*, 35(7): 544-55.
- Nadiri H., 2011. Customers' zone of tolerance for retail store, *Service Business*, April.
- Newman R.G., 1988. Single source qualification. *Journal of Purchasing and Materials Management*, 24(2): 10-17.
- Olaru D., Purchase S., & Peterson N., 2008. From customer value to repurchase intentions and recommendations. *Journal of Business & Industrial Marketing*, 23(8): 554-65.
- Pina J.M. et al., 2006. The effect of service brand extensions on corporate image: An empirical model. *European Journal of Marketing*, 40(1/2): 174-97.
- Roig J.C.F. et al., 2006. Customer perceived value in banking services. *International Journal of Bank Marketing*, 24(5): 266-83.
- Roy D., & Banerjee S., 2007. CARE-ing strategy for integration of brand identity with brand image. *International Journal of Commerce and Management*, 17(1/2): 140-48.
- Seth N., Deshmukh S.G., & Vrat P., 2005. Service quality models: A review. *International Journal of Quality & Reliability Management*, 22(9): 913-49.
- Sirdeshmukh D., Singh J., & Sabol B., 2002. Consumer trust, value and loyalty in relational exchanges. *Journal of Marketing*, 66(1): 15-37.
- Sweeney Jillian C., Geoffrey N. Soutar, & Lester W. Johnson, 1999. The role of perceived risk in the quality-value relationship: a study in a retail environment. *Journal of Retailing*, 75(1): 77-105.
- Ulag W., 2003. Capturing value relation in business relationships: A customer perspective. *Industrial Marketing Management*, 32: 677-93.
- Ulag W., & Eggert A., 2006. Value-based differentiation in business relationship: Gaining and Sustaining key supplier status. *Journal of Marketing*, 70: 119- 39.
- Walker R.H., Johnson L.W., & Leonard S., 2006. Re-thinking the conceptualization of customer value and service quality within the service – profit chain. *Managing Service Quality*, 16(1): 23-36.
- Wartick S.L., 2002. Measuring corporate reputation. *Business and Society*, 41(4): 371-92.
- Whetten D.A., & Mackey A., 2002. A social actor conception of organizational identity and its implication for the study of organizational reputation. *Business and Society*, 41(4): 393-414.
- Wilson D.T., 1995. An integrated model of buyer-seller relationships. *Journal of the Academy of Marketing Science*, 23:335-45.
- Woodruff R., 1997. Customer value: The next source for competitive advantage. *Journal of the Academy of Marketing Science*, 52(2): 139-53.
- Zeithaml V., 1988. Consumer perception of price, quality and value: A means-end model and synthesis of evidence. *Journal of Marketing*, 52(3): 2-22.