

## CHARACTERISTICS THAT FORM CUSTOMER VALUE IN BANKS: A RESEARCH ON ATMs (AUTOMATED TELLER MACHINE)

Assist. Prof. Nilsun SARIYER, PhD  
Onsekiz Mart University, TURKEY

### 1. Introduction

Customer value concept has been discussed in marketing for the last two decades. Many of the concepts such as perceived value, shopping value, net value of the customer, consumer value have been used in the same meaning. Moreover, many of the concepts used with “customer value concept” such as value, benefit, price, quality, loyalty, satisfaction have still been under discussion.

Discussing customer value requires us to mention a two sided concept including “the value given by the customer” and “the value given to the customer”. These two values are not given by the seller organization. They are the values perceived by the customers. Therefore, rather than the customer value, the concept of perceived value is used. This value can be defined as the benefit which the customer obtains in return for what the customer gives. As it can be understood from the definition, the way of providing value to customers is possible through increased benefit. In other words, adding services, things that customers view as critical, beneficial or unique is necessary. From this point, three values that businesses provide to their customers can be expressed as expected value, desired value and unexpected value. Expected value is standard services or goods for the customers given by the business depending on its own capacity of production and marketing. Expected value is a concept where emotional ties

that customers establish with the organization come fore. If the customer has increased emotional tie the customer goes on buying the products of the business. Desired value is characteristics that provide positive value to customers. These characteristics are simple and they are provided without a need to performing a marketing research. Unexpected value is providing value to above customers’ expectations. It helps in strengthening the ties between customers and the business. Another point that should be kept in mind is that these values can only be referred to as value if they are perceived by the customer.

### 2. Measurement of customer value

When studies on customer value are examined it can be seen that they increasingly consist of how customers express value. Holbrook identified characteristics of customer value as effectiveness, quality, social value, game, aesthetics and altruism. Mathwicks, Malhotra and Rigdon expressed that customer value is a formation of a set of concepts that are visual appeal, entertainment, escapism, enjoyment, efficiency and economic value.

Bono referred customer value as perceived value, actual value, entry value, side value, synergy value, security value, attractivity value, fashion value, function value, easiness value and tying value. Noumann divided the values identified by Bono into two category and classified them as characteristics that

depend on experience and characteristics that depend on operation. Holbrook also identified the factors of efficiency, excellence, politics esteem, play, aesthetics, morality and spirituality.

Sheth, Neuman, and Gross expressed customer value as social, economic, functional, informational and situational. In the same manner, they proved that customer value consists of functional, emotional, social, situational and informational dimensions. For this purpose they developed the PERVAL scale. In the formation process of the scale 85 statements were used in the beginning and then the number of the statements was eliminated to 19 at the end of the studies. Moreover, Sweeney and Soutar's scale to identify perceived value of durable consumer goods at brand level have still been accepted and used by many academics. However, it should be considered that Sweeney and Soutar's scale measures the selling process as one phase –pre-selling, time of selling and after selling and it accepts customer value as multi-dimensional and ignores informational and situational values.

Petrick developed SERV-PERVAL scale starting from PERVAL scale. They concluded that customer value is formed by quality, emotional value, monetary price, behavioral price and reputation. Following Petrick, Sanchez, Callariso, Rodriguez and Moliner developed a different scale for the services and measured customer value. They attempted to identify the value of services used by customers by a scale that they called GLOVAL, the first study performed in tourism sector values of functional value (establishment), functional value (professionalism), functional value (quality), functional value (price), emotional value and social value dimensions have been identified. In another study of this scale, Roig, Sanchez, Teno and Monzonis identified some dimensions in bank services and tourism services.

### 3. Customer value in the banks

Great innovations in information technology and communication have revolutionized the banking industry. Banks took huge leaps particularly by using technological infrastructure rapidly. Banks that adopt innovations of technology fast attempt to increase satisfaction levels of their customers. Call centers, ATM machines and kiosks are such examples. However, customer dissatisfaction is quite high. Some of the banks aim to increase customer value by giving importance to customer relations management and data mining. Banks try to pursue different service programs to customer groups which they create by using the data. The purpose of their efforts aims increasing the perceived value of their customers. Highly competitive nature of banking industry which consists of competition among state owned and privately owned banks require keeping current customers doing business and moving towards creating customer value rather than customer satisfaction. Studies on this topic support banks' moving towards creating customer value. Loveman stresses the need to create customer value besides turning data into information. Payne and Jahoda expressed moving towards creating new values to customers rather than the values served to users. On the other hand Woodruff stresses the importance to create high values to customers due to highly competitive nature of the 21<sup>st</sup> century. Banks serve their customers with the unexpected values by adding new values each day. How do customers perceive the values created by the banks? This study aims to find an answer to this question.

### 4. The purpose of the research

This study aims to identify whether or not customers see the characteristics that banks add in order to create value to customers as "customer value". For this purpose, how current

customers place characteristics which the banks provide to them while they use banking services as different dimensions have been examined. Scales developed about customer value have been used in this research. Because the aim of this study is to identify how customers place the services of businesses as customer value. So the study does not try to identify value dimensions.

## **5. Material and method**

In the research that has descriptive features, data have been primarily gathered. Considering various types of the services given by the banks performing a reduction in the services to be analyzed was decided to be performed. Therefore only a single service of the banks has been studied. Yet, in the selection of the service, the factor of service coverage for all consumers was taken into consideration. So ATM machines were selected. ATM machines occurred as a result of technological improvements can be used in drawing out/ in money, transferring money to deposit accounts and between accounts, requesting cheque book, issuing traveler's cheque and accepting credit card applications. In this regard, ATM machines are inseparable parts of the banking system. Besides above mentioned characteristics of ATM machines several characteristics such as the ability to use the machine without bank card, not only for drawing money but also drawing in money, issuing traveler's cheque, accepting credit card application, money transfers, showing television advertisements on the screen, presentation of new services, applicability of the ATM machine for all branch operations add new values every day. Considering above mentioned topics, ATM machines have been selected for the research. Another factor that ATM machine users are usually the current customers of the banks has been effective in selecting ATM machines. Data obtained between the dates of

October-November 2008 from the customers who performed their banking transactions using ATM machines by face to face survey method in front of the machines. The sampling method used in the study is one of the non-random sampling methods, convenience sampling.

In the questionnaire form, classified measurement method which as unmetrical but categorical characteristics studied in Bono, Naumann and Holbrook's customer value has been adopted to banks. These characteristics are performance, color, respectability, innovation, comfort, easiness of use, appearance, accessibility, speed, touch-screen, image wholeness, continuous functioning, pleasure of use, coverage, reputation and stability. The survey has been conducted on 30 users first as pilot study and then it has been implemented. The survey has been conducted on 350 people face to face. As a result of pre-evaluation 47 completed surveys were eliminated as they were found faulty and misleading. Data obtained from 303 consumers were analyzed by using multi-dimensional scaling method. SPSS 15.0 software has been used in the analysis.

## **6. Findings**

Before starting the multidimensional scaling analysis internal reliability of the characteristics included in the analysis has been examined. Variables that are irrelevant to internal reliability have been excluded. As a result of two reliability analyses variables of performance, respectability, innovation, comfort, stability, wholeness, aesthetics, reputation, and color have been excluded. The rest of the characteristics were included in the multidimensional scaling analysis. In order to test reliability and validity of the results of multidimensional scaling analysis appropriateness index and tension values known as  $R^2$  have been considered. As a result of 3 repetitive figure  $R^2$  of our research has been 0,

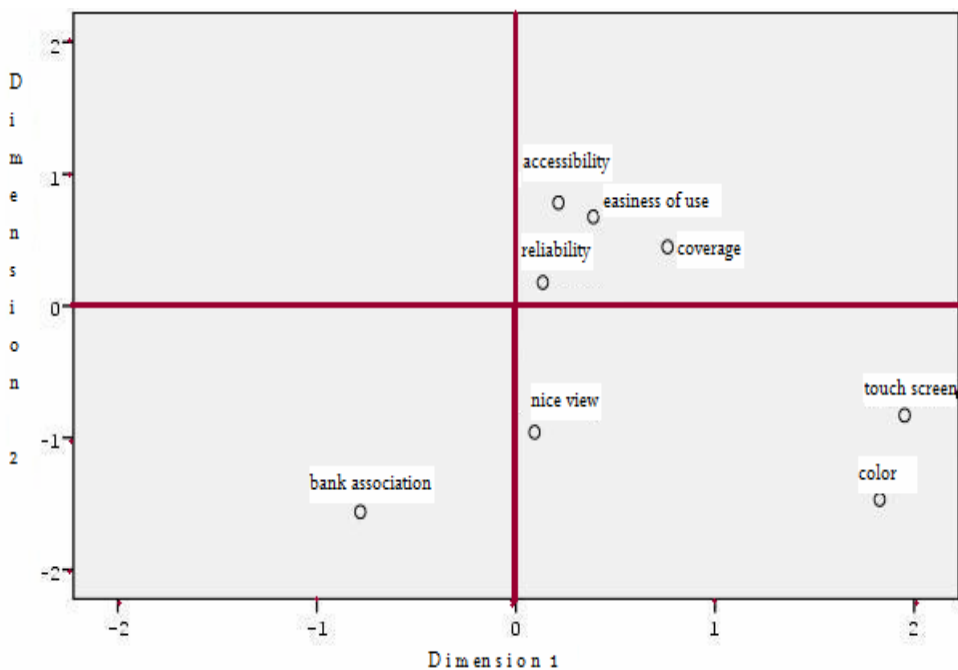
79130. This value is the square number of correlation index and it is expected to be high. 60 % and over is a desired result. Tension value in our research has been 0,18718. This value shows the quality of multi-dimensional scaling. Ratios below 2,5 demonstrate that multidimensional scaling is at very good levels.

Table 1 includes the demonstration results obtained in order to draw out spatial map as a result of the analysis. Figure 1 demonstrates the spatial map drawn by SPSS 15.0.

**Table 1: Results of two dimensional demonstrations**

Object Number	Object name	Dimension (Coordinates)	
		1	2
1	Nice view	,0935	-,9584
2	Touch screen	1,9522	-,8298
3	Reliability	,1301	,1556
4	Accessibility	,2135	,7825
5	Bank association	-,6931	-1,5221
6	Easiness of use	,6186	,6458
7	Color	1,8393	-1,4540
8	Coverage	,7616	,4474

**Figure 1: Spatial Map of Customer Value**



This map shows the value that customers give to ATM. Axis is named as aesthetics characteristics and using characteristics that depend on the use of ATMs.

Characteristics on the right field of "0" point are those that are related to aesthetics. These are nice view, touch screen, color, reliability, accessibility, easiness of use, and coverage. Bank customers regard these characteristics as aesthetical characteristics of ATMs. Characteristics on the left field of "0" point is called as bank association. It is

seen as an aesthetical characteristic. Touch screen has been selected as the most aesthetical characteristic by the respondents with their 1,9522 demonstration value.

Characteristics above "0" point are those related to use of ATM such as accessibility, easiness of use, coverage and security and below "0" point are those that are related to characteristics unrelated to the use of ATM such as nice view, touch screen, color and bank association. In relation to the use, the most significant characteristics from the

point of customers has been accessibility with a demonstration value of 0,7825. Bank association with a demonstration value of -1,5221 has been the characteristic that has not been related to the use of ATM.

## 7. Conclusion

Businesses attempt to attract customers by creating value. Each characteristic they add for this purpose is perceived as a value by the customer. This research shows how customers evaluate the value as a result of the sacrifice they bear. ATMs have been chosen so that particularly the customers who have ties with the bank have been preferred. Current customers have been targeted so that it could be understood that characteristics of ATM machines have been but forward as a value could be understood. At the end of the research it has been identified that customers consider characteristics of aesthetics and use of ATMs have come fore while the machines are used. This research concludes that customers perceive ATMs in two dimensions; characteristics of aestheticism and use. Different dimension can be referred to in

the placement of the characteristics. These are characteristics that are related to aesthetics and use, characteristics that are related to aesthetics but unrelated to use, characteristics that are unrelated to aestheticism but related to use and characteristics that are unrelated to both. When each field is considered it could be seen that there are different characteristics. While characteristics that are related to aestheticism and use are accessibility, easiness of use, coverage, and security; characteristics that are related to aestheticism but unrelated to use are touch-screen, color, and nice view. The only characteristic that has been unrelated to both aestheticism and use has been bank association. No characteristics unrelated to aestheticism but related to use has been found in the research. Adding value in this field is important in that banks could create new values to their customers that shows a path for future studies on the issue. Because apart from previous scales of customer value, a multi dimensional scaling has been used to identify a different approach in understanding what characteristics customers give importance and turn them into value has been tried to be discussed.

## REFERENCES

De Ruyter, K., Wetzels, J.K., Lemmink, M.J. and Mattson, J.	“The dynamics of the service delivery process: a value-based approach”, <i>International Journal of Research in Marketing</i> , 14, pp.231-243.
Dodds, W. B.; Monroe, K.B. and Grewal D.	“Effect of price, brand and store information on buyers' product evaluations”, <i>Journal of Marketing Research</i> , 28, pp.307-319.
Hall, J. E., Shaw, M. R., Lascheit J. and Robertson, N.	“Gender differences in a modified perceived value construct for intangible products”, <i>Visionary Marketing for the 21<sup>st</sup> Century: Facing the Challenge</i> , pp. 457-462, ( <a href="http://smib.vuw.ac.nz:8081/www/ANZMAC2000/CDsite/papers/h/Hall2.PDF">http://smib.vuw.ac.nz:8081/www/ANZMAC2000/CDsite/papers/h/Hall2.PDF</a> )
Holbrook, M. B.	“The nature of customer value: an axiology of services in the consumption experience”, <i>In Service Quality: New Directions in Theory and Practice</i> , Ed: R. Rust ve R. L. Oliver, Sage Publication, pp. 21-71.
Holbrook, M. B.	“Consumption experience, customer value, and subjective personel introspection:an illustrative photografic essay”, <i>Journal of Business</i>

	<i>Research</i> , 28 (6), pp. 714-725.
Kantamneni, S. P. and Coulson, K. R.	"Measuring perceived value: scale development and research findings from a consumer survey", <i>The Journal of Marketing Management</i> , 6 (2), pp. 72-86.
Khalifa, A.S.	"Customer value: a review of recent literature and an integrative configuration", <i>Management Decision</i> , 42 (5), pp. 645-666.
Mathwicks, C., Malhotra, N. ve Rigdon, E.	"Experiential value: conceptualization, measurement and application in the catalog and internet shopping environment", <i>Journal of Retailing</i> , 77(1), pp. 39-56.
Monroe, K.B.	<i>Pricing, Making Profitable Decisions</i> , 2nd ed., London: McGraw Hill.
Payne1, R. and Jahoda, A.	"The glasgow social self-efficacy scale—a new scale for measuring social self-efficacy in people with intellectual disability", <i>Clinical Psychology and Psychotherapy Clin. Psychol. Psychother.</i> 11, pp. 265–274.
Petrick, J. F.	"Experience use history as a segmentation tool to examine golf travellers' satisfaction, perceived value and repurchase intentions", <i>Journal of Vacation Marketing</i> , 8 (4), pp. 332-342.
Petrick, J. F.	"Development of a multi-dimensional scale for measuring the perceived value of a service", <i>Journal of Leisure Research</i> , Second Quarter, 34 (2), pp. 119-134.
Roig, J.C.F., Garcia,J. S., Tena, M. A. M. and Manzois, J. L.	"Customer perceived value in banking services", <i>International Journal of Bank Marketing</i> , 24 (5), pp. 266-283.
Sanchez, J, Callarisa, L., Rodriez, R. M. and Moliner, M. A.	"Perceived value of the purchase of a tourism product", <i>Tourism Management</i> , 27, pp. 394-409.
Sanchez-Fernandez, J., Inisesta-Bonillo, R.A. and Holbrook, M. B.	"The conceptualisation and measurement of customer value in services", <i>International Journal of Market Research</i> , 51 (1), pp. 93-113.
Sheth, J. N., Newman, B. I. and Gross, B. L.	"Why we buy what we buy: a theory of consumption value", <i>Journal of Business Research</i> , 22 (March), pp. 159-170.
Sweeney, J. C., Soutar, G. N. and Johnson, L. W.	"The role of perceived risk in the quality-value relationship: a study in a retail environment", <i>Journal of Retailing</i> , 75 (1), pp. 75-105.
Zeithaml, V. A.	"Consumer perceptions of price, quality and value: a means-end model and synthesis of evidence", <i>Journal of Marketing</i> , 52 (July), pp. 2-22.