Customer Value Analysis from a Customer's Perspective:

Case of Turkish Airlines Domestic Passengers

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Abstract

The value concept seems to be one of the most recent and most popular trends. In recent years, customer value has become a major focus among strategy researchers and practitioners as an essential element of a firm's competitive strategy. (Ravald and Grönroos, 1996) Customer value and customer benefit are key concepts in marketing as well as operations management the emphasis in airline management seems to lie on cost management and traditional quality management customer value concepts in passenger air transport, becomes clear that there have been changing focuses not necessarily always driven by customer needs but more by technical and market influences. (Biegera, Wittmerb) Therefore, this article focuses on customer value from a customer's perspective and study focuses on determination of the domestic passenger's perceived value of Turkish Airlines' services, like for example price, convenience of flights, on time performance etc. This concept is a new strategic orientation in the industry.

Keywords: Airlines, Customer Value, Customer Value Analysis, Turkish Airlines (THY)

1. Introduction

Understanding what buyers value within a given offering, creating value for them, and then managing it over time have long been recognized as essential elements of every market oriented firm's core business strategy (Drucker, 1985, Porter, 1998; Desarbo, Jedidi and Sinha, 2001).

Companies are searching for new and better ways to create value and differentiate their market offerings to attract and keep customers and make a profit (Bendapudi, Leone 2003). Many firms have been interested in Customer Value Analysis which involves a structural analysis of the antecedent factors of perceived value (i.e., perceived quality and perceived price) to assess their relative importance in the perceptions of their buyers.   Understanding what buyers value within a given offering, creating value for them, and then managing it over time have long been recognized as essential elements of every market-oriented firm's core business strategy (Porter, 1998).

The value concept exists only to a limited extent in the marketing literature. After having studied the theories of several consumer behaviour researchers, we found that "value" is constantly used in a context meaning values of consumers (Engel and Blackwell, 1982; Engel *et al*., 1990; Schiffman and Kanuk, 1978; Zaltman, Wallendorf, 1983). Peter and Olson (1993), however, discuss another meaning of value – the value or utility the consumers receive when purchasing a product. In services marketing, the value concept appears quite frequently, but any clear definition cannot be found until we turn to the literature on pricing. Monroe (1991) defines customer-perceived value as the ratio between perceived benefits and perceived sacrifice (Monroe, 1991, Ravald, Grönroos, 1996).

In the academic literature, value has been conceptualized in various ways. In most places, customer value has been defined as a tradeoff between (customer-perceived) quality and (customer-perceived) price. Perceived quality, in turn, has been conceptualized as buyers' "judgment about a product's overall excellence or superiority" (Zeithaml, 1988), and perceived price is defined as the consumers' subjective perception of the objective price of the product (Jacoby and Olson, 1977). Similarly, Porter (1985) likens buyer value as a tradeoff of buyer-perceived performance and buyer cost. A comparable view is taken in industry where perceived value has been variously defined in much of the popular press as "quality at the right price" or as "affordable quality" (Desarbo, Jedidi and Sinha, 2001).

2. Analysis and Measurement of Delivering Value to Customers

Customer value has something to do with the benefit which a product or service creates in customer in return for the cost that customer bear in order to get that service. The concept of value is often compared to quality and price. Quality is a

feature that increases or decreases the value of a product or a service. This can therefore be stated as "quality = customer satisfaction." Similarly, price factor is the money demanded for a product or a service but it does not necessarily indicate the value of that product or service. The value of a product or service is the proportion of the benefit it brings to customer to the price or cost. This expression can be best explained with the following formula (Özevren, 2000).

V= (Q+A) x I/P

V: Customer value

Q: Quality of product or service expected by customers

A: Additional features not expected by customers

I: Importance attached to the features by customers

P: Price

Importance Attached by Customers to the Features of Product or Service (I): While calculating the value, customers are asked to identify how important the product or the service they buy and to score it based on a certain grading. Once how customers perceive the product or the service is determined, the multiplication of these values (Q+A)*I shows the benefit the product or the service brings to customers. The value can easily be calculated with the formula stated given above by means of benefit matrix. In benefit matrix, the importance which customers attach to the services offered is multiplied by the level of customers' satisfaction and the total benefit concerning the product or the service is determined. Value, on the other hand, is found by dividing the total benefit by sale price or costs.

As a result of the developments and improvements to be performed in the services offered or in the criteria, the calculated value can be used in comparing the results of the researches to be conducted under the same conditions. However, the calculated value will display variations for each price or cost taken as the base according to the formula.

Expectation matrix is established so that the data in benefit matrix can be evaluated. Expectation matrix has two dimensions: importance level of the service factors and satisfaction level of customers. Expectation matrices are drawn based on the threshold values of satisfaction level and importance degree. In other words, the evaluation is carried out by taking the mean value of satisfaction and the mean degree of importance. The means for both satisfaction level and importance degree are determined through multiplying the number of people checking the relevant point by the points and then through dividing the gained value by the number of people providing answers (Özevren, 2000).

Both of the axes above indicate the levels of importance and satisfaction of customers. There are four areas in this matrix. These areas can be as the following: (Martilla, James 1977, Ainin, Hisham, 2008).

(Insert Table 1 Here)

Quadrant I (Concentrate here): In this area, although the importance attached to product or services by customers is high or very high, the level of customer satisfaction is low.

Quadrant II (Keep up the good work): In this area, products and services are important for customers and satisfaction level of customers about these features is high.

Quadrant III (Possible overkill): Although the qualities of the products and services in this area are low for customers, the level of customer satisfaction about these qualities is high. Here, customers are offered opportunities far beyond their expectation.

Quadrant IV (Low-priority area): In this area, just the presence of standard features is considered sufficient. For each feature of products or services, a point is marked according to importance and satisfaction levels on expectation matrix. In this case, many points are gained for all of the features and then high-priority areas to operate are determined.

3. Research Methodology

Objective of the Study: This study focuses on determination of the domestic passenger's perceived value of Turkish Airlines' services.

Limitations of the Research: The research is limited by the questionnaire answered between   the 1-7 of January, 2007 by 190 passengers. Data were collected from passengers departing from Istanbul Ataturk Airport.

Research Method: Face-to-face interview is used for the research.

Research Medium: The research medium consists of 190 passengers. For sampling purposes, 190 was randomly selected from the passengers between 1-7 of January and included in the questionnaire analysis.

Collection of the Research Data: A pilot work has been done with 13 passengers to learn about how good the questions in the questionnaire form serve for the objective of the research. According to answers to those questions, some modifications have been done in the questions. 190 usable questionnaires were gained in the research and Microsoft Office Excel and SPSS 13, 0 (Statistics Pack for Social Sciences) were used in the analysis.

Reliability Analysis of the Research: It is possible to say that the research is reliable as a whole, according to the coefficient of reliability α = 0,884

4. Research findings

The descriptive information related to the properties of the subjects participating in the research can be seen in the tables below.

(Insert Table 2 Here)

59 % of 100 subjects are male and 41 % of them are female passengers.   When the distribution of the subjects according to their age range is analyzed it can be seen that 15,2% of them are aged between 15-25, 54,8 % of them are aged between 26-35, 22,7 % of them are aged between 36-45, 5,8% of them are aged between 46-55 and %1,5 of them are aged 56 or more than it. Consequently it is seen that passenger intensify between "26-35".

When the distribution of the members related to their education background is examined, it can be seen that 57,4 % of the members are graduates, 18,9% of them are master's degree graduates and 5.8 % of them are doctor's degree graduates. When the proportion of the members who are graduates and postgraduates is analyzed in terms of the general sum a high proportion has been occurred as 82, 1 %.

When the monthly incomes of the members are examined, it has been seen that 36,9 % of them have monthly income as 1000-1999, 36,3% of them have monthly income as 2000-2999, 10 % of them have monthly income as 3000-3999, 7,9 % of them have monthly income as 4000- more than it.

Passengers participating in the survey were asked about the general range of the tickets they buy. The responses received revealed that the prices of the tickets bought by the passengers were in the range of 81 TL to 120 TL (57, 4%). This distribution was followed by ticket prices in a range of 121-160 TL by 19% and 41-80 TL by 11%.

(Insert Table 3 Here)

Expectation matrix was established by means of the mean scores computed with benefit matrix for satisfaction levels and importance degrees within each service and criterion, determined by multiplying the number of people checking the relevant point by the points and then through dividing the gained value by the number of people providing answers.

(Insert Table 4 Here)

In the area of "Concentrate here" (Quadrant I), while there is not any service, it should be taken into evaluation because the criterion of convenience of the schedule turned out to be higher than the threshold value.

In the area of "Keep up the good work" (Quadrant II) are there the services and criteria related to the image of airline company, on time performance, attitude and behavior of the staff, security, baggage services, flight safety and cabin cleanliness.

In the area of "Possible overkill" (Quadrant III) are there are the services and criteria related to aircraft comfort and design and availability of online services.

In "Low-priority area" (Quadrant IV) are there the services and criteria related to convenience of schedule, convenience of flight line, ticket fares, aircraft type, variety-speed-quality of catering services, paid catering services and meeting special requests in check-in and boarding procedures.

(Insert Figure 1 Here)

As can be seen in Figure 1, the services and criteria seen most important by customers are the image of airline, on time performance, attitude and behavior of the staff, safety, baggage services, flight safety and cabin cleanliness and convenience of the schedule. THY (Turkish Airlines) has reached the desired level in the services and criteria about the brand image of airline company, on time performance, attitude and behavior of the staff, safety, baggage services, flight safety and cabin cleanliness. These features, as can be seen in the figure, are in Quadrant II, in the area of "keep up the good work." The fact that THY has been a flag carrier airline company and always delivers improved services to its customers leads to its strengthened brand image. There should be more studies on customer relations of THY so that its brand image can be improved more. Moreover, questionnaires and similar activities measuring customer satisfaction should be conducted regularly and continuously in addition to the efficient operation of suggestion and complaints units for more accurate determination of customers' demands and expectations.

THY pays attention to on time performance and baggage services and criteria. However, pleased with the present situation, the company shouldn't rest on its laurels in terms of control mechanism. To this end, they should keep up preventive measures against any possible factor, rather than weather conditions, which may cause delays. Likewise, the same determined policy should be followed in the services and criteria for flight safety and cabin cleanliness. Training units should improve and revise their activities in order for the staff to display their attitude and behavior to their customers in a more positive way.

Although the criterion for the convenience of the schedule turned out to be in low-priority area, it can actually be considered in the Quadrant I as it appears just on the threshold. In other words, while the criterion for the convenience of the schedule is the least effective factor in customers' choice, it couldn't be made to reach the satisfactory level for customers. Though the criterion for the convenience of the schedule does not seem to be regarded as an effective factor for customers' choice of the airline company, relevant actions for the mentioned criterion should be enhanced and performed continuously in order not to cause any fall in the satisfaction level of THY customers. In addition to feasibility cost analysis of the schedule, new methods and arrangements which can determine customers' opinions and suggestions will surely deliver more satisfaction to customers. Obviously, even if customers are satisfied with the mentioned services and criteria, THY should improve its services regularly and continuously and get involved in preventive actions against possible mistakes.

Customers' level of satisfaction was high about the services and criteria in Quadrant III related to aircraft comfort and design and availability of online services. These services and criteria are in the area of "possible overkill." While the activities for the services and criteria about aircraft comfort and design and availability of online services should be conducted at the same level, there shouldn't be any actions causing cost increase.

The services and criteria in Quadrant IV related to convenience of schedule, convenience of flight line, ticket fares, aircraft type, variety-speed-quality of catering services, paid catering services and meeting special requests in check-in and boarding procedures are regarded as the least influential factors in terms of affecting customers' choice of the airline company. The degree of the importance attached by the customers to these services and criteria turned out to be low, too.

As a result of the measurement of customer value about the services and criteria offered by THY to its customers, it comes out that THY can create a certain level of value for its customers. By means of this application, the value calculated for the services and criteria offered by THY to its customers was measured as 1, 4860. In order for this value to be evaluated, scale value needs to be computed first of all. When the evaluation was performed out of four full points separately for importance degree and satisfaction level, a total of sixteen services and criteria were questioned and the average ticket fare was accepted to be 108,21 TL computed by means of the data in Table 2, the maximum value of the scale was calculated as (4x4x16)/108,21=2,36.

1, 4860, the calculated value for the application performed, is between 0-2, 36 values and at a point of 62, 81%. Accordingly, taking THY's average domestic line air fare into consideration, the research conducted show that THY has created customer value at a level of 62, 81%.

5. Conclusions

It could be suggested in light of the data from this research that one of the key marketing strategies of airline companies operating in domestic lines should be comprised of activities aimed at creating value for their customers. On the other hand, they should accurately determine the features and structure of the market and customers they deliver service to so that they can determine the methods and strategies suitable for their operational structures.

Airline companies have to ensure that ticket fares do not display much variation over the current rates by carefully examining the factors affecting cost. In addition to ticket fares, other services and criteria also play a role in delivering value to customers. It is also apparent that other service features for the easiest and most convenient access to airline service such as making fast reservation and meeting special requests in check-in and boarding procedures are effective, too. The time spent by passengers for baggage checking should be eliminated by means of using electronic tickets in baggage services and the control mechanism for the staff in charge of baggage services should be managed more efficiently.

Even if airline companies offering services in domestic lines seem to have achieved the desired level according the measurement results for the value they deliver to their customers, they have to continue their development and improvement activities in their services regularly so that they can maximize their customers' satisfaction level.

It is considered that airline companies can perform the same measurement and evaluation for the new services which they will add to the current ones and carry out tasks aimed at increasing customer value and that airline companies providing the same kind of service could make comparisons between their services for creating customer value.

It is also thought that this study, conducted in domestic lines, can also be used for the customer value measurement of airline companies providing service in international flights and customer value measurement practices can be applied into other sectors as well as airline sector.

Final words: Airline managers of the future should be aware of customer value as an increasingly important factor for driving continued growth. It is important that a focus is put on customers' real needs and expectations instead of stated preferences.

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Table 1.   Expectation Matrix

Importance Degree			
	High	Quadrant I (Concentrate here)	Quadrant II (Keep up the good work)
	Low	Quadrant IV. (Low-priority areas)	Quadrant III. (Possible overkill)
		Low	High

Satisfaction Level

Table 2. Demographic

Nationality	*Frequency*	*Percent*
Turkish	190	100
Other	0	0
Gender	*Frequency*	*Percent*
Man	113	59
Women	77	41
Age	*Frequency*	*Percent*
Between15–25	29	15,2
Between 26–35	104	54,8
Between 36–45	43	22,7
Between 46–55	11	5,8
56 and more	3	1.5
Education	*Frequency*	*Percent*
primary school	2	1
high school	32	16.9
University	109	57,4
Master	36	18.9
Doctorate	11	5.8
Monthly income(TL)	*Frequency*	*Percent*
0- 999	17	8.9
1000–1999	70	36.9
2000- 2999	69	36.3
3000- 3999	19	10
4000 and more	15	7.9
Total	**190**	**100,0**

Table 3.   Range of Ticket Prices for Customers

Price (TL)	Frequency	Percent
400	6	3,1
401–800	21	11,0
801–1200	109	57,4
1201–1600	36	19,0
1601–2000	18	9,5
Total	190	100,0

Table 4. **Benefit Matrix for the Factors Affecting Passengers' Travel Preferences**

| Travel Preferences	Important (mean)	Satisfaction (mean)	Benefit
1. Convenience of schedules	3,31	2,77	9,1687
2. Convenience of flight line	3,16	2,88	9,1008
3. Ticket fares	3,29	2,70	8,8830
4. Airline images	3,51	3,27	11,4777
5. On time performance	3,60	3,16	11,3760
6. Aircraft type	3,08	2,98	9,1784
7. Aircraft comfort	3,20	3,03	9,6960
8. Quality of catering services	2,90	2,86	8,2940
9. Paid catering services	2,36	2,46	5,8056
10. Behavior of the staff	3,44	3,11	10,6984
11. Flight Safety	3,76	3,37	12,6712
12. Baggage services	3,60	3,08	11,0880
13. Security	3,86	3,42	13,2012
14. Design and availability of online services	3,16	3,07	9,7012
15. Cabin cleanliness	3,54	3,12	11,0448
16. Meeting special requests in check-in and boarding	3,13	3,01	9,4213
Total	52,9	48,29	
Threshold	3,31	3,02	
Total benefit			160,8063
Average ticket price (YTL)	108,21		
Calculated value	1,4860		
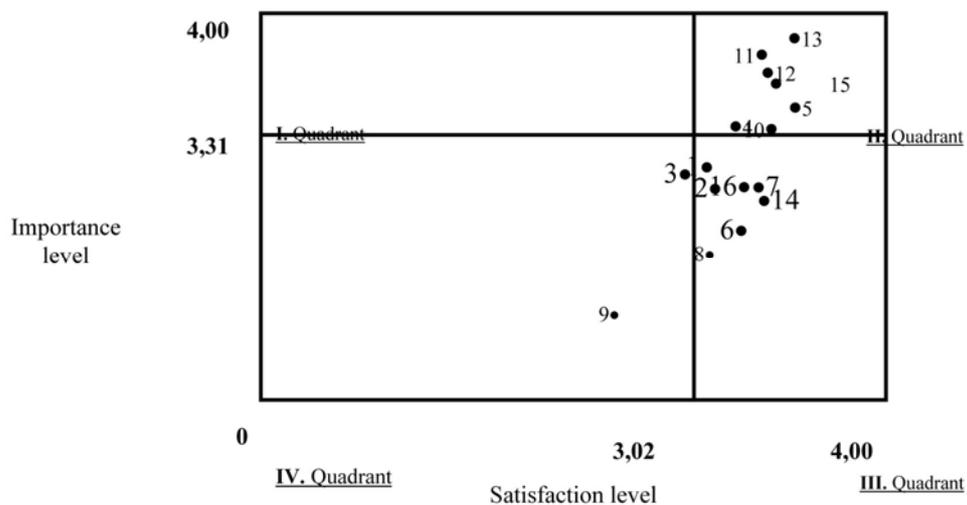
Figure 1. Expectation Matrix for the Factors Affecting Passengers' Travel Preferences