



Evaluating and Gap Analyzing the Quality of Services Provided to Customers from Airlines Company

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ABSTRACT

Human being is now living in the technology era and is experiencing the economy of the pioneer technologies, consumer-based economy and eventually economy of the services. People are now benefiting from the fast information exchange and facile transportations and the progress in technology made all these possible. This phenomenon has raised the expectation of the public concerning standard services. In addition to that, the competitive market provided a positive attitude for the improvement of the services and keeping the customers satisfied. This study tried to apply Kano and SERVQUAL models and by synthesizing the two models resolves their shortcomings and proposes new capacities for improving the services. Aseman Airlines is one of the most important service organizations in providing airlines. Results of the study show that the quality of the services provided by Aseman Airlines does not meet the customer's expectations and there is a negative gap in all the five factors of service quality. The biggest gap was related to the insufficient time of the employees for handling the passengers' requests and the narrowest gap was related to the courtesy of the employees. It can be concluded that the focus of the company's managers should be placed on the improvement of the services whose gaps are bigger and the customers are less satisfied with, otherwise the company will face huge challenges for providing the services.

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Introduction

In today's super-competitive era no company can be successful unless it responds to the demands of its customers and satisfies them. Recent studies show that the quality of the services is more influential than the features of the products or services in securing the customer's loyalty and a good sell. Good quality of the services plays an important role in reducing the costs, increasing the level of the customer satisfaction and customer loyalty, boosting the profits and the general performance of the company. Maybe that is why a considerable number of administrators focused on the service quality and methods of its evaluation (Gronross, 2000). Knowing about service quality led to the efforts for providing good quality services through which one can expect the satisfaction of the customers. Considering the weakness of Iranian companies in Service Quality (that can be observed in almost all the organizations) the study tried to: firstly, introduce Service Quality and its role in successful companies and then introduces various models presented in the literature of marketing. In the next step Kano and SERVQUAL models were used to evaluate the service quality of an Iranian airliner. It is expected that the study becomes a sample for other airlines and service organization, helps them find their shortcomings in service quality and finally provide better services.

Background

Quality is a determining factor for business success, development and obtaining better competitive positions. Increase in demand and serious international competitions led the companies to provide their customers with high quality products and services. Quality can be defined as the capability of a product or service in meeting the expectations of the customer and even going beyond that in satisfying them. Quality is a

conception imposed by the dynamics of the market and demanded by the final customer. Perceived quality is the customer's judgment about the overall advantage of a product. Perceived quality is an attitude related to satisfaction but is not equal to satisfaction. It results from comparing the expectations and the perceived performance (Parasuraman et al, 1991). Services have some features that distinguish them from products like being abstract, inseparability, variability, morality and non-transferability. Quality of the services is explained as the difference between the customer's expectations and the perceived received services (Jakiel and Tan, 2004). Service quality is defined as the constant attention of the organization in meeting the needs and demands of its customers (Miao and Bassham, 2007). Customers or service receivers evaluate the service quality by comparing their expectations and demands with the received services. Three kinds of quality can be perceived by the customer (Parasuraman et al, 1996):

Satisfactory Quality: is a state in which all the customer's expectations (CE) are met ($PCE=PQ$)

Ideal Quality: is a state in which the perceived quality is beyond the customer's expectations ($PQ>PCE$)

Unacceptable Quality: is a state in which the perceived quality is less than the customer's expectations ($PQ<PCE$)

Scholars agree on the importance of the customer's satisfaction and service quality and consider them as basic conception of service management. Studies show that customer's satisfaction is influential in maintaining the customers, profitability and success of the organization in market competitions. Moreover, service quality is one of the things that can give the organizations a competitive advantage. Although satisfaction and quality have common grounds, satisfaction has a wider scope because quality is more focused

on different dimensions of the service. From this viewpoint, service quality is considered as a part of satisfaction whose relationship is presented in figure No. 1. As the figure suggests, service quality shows the customer's perception from the five dimensions of quality while satisfaction is more comprehensive and includes service quality, good quality, price and also situational and individual factors.

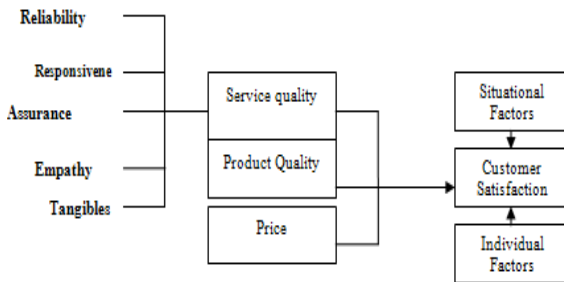


Figure 1

Zeithameal and Bitner, 1996

Most of the theorists consider satisfaction and quality as two distinct conceptions. They argue that while service quality is an overall attitude toward the organization, customer satisfaction is related to a particular interaction of the customer with the organization and is a short-term criterion and is more focused on the personal and emotional reaction (Parasuraman et al, 1988).

SERVQUAL Model

SERVQUAL is one of the most famous models of service evaluation devised by Parasuraman, Bary and Zeithmal. Parasuraman and his colleagues found out that customers evaluate service quality by comparing the performance with what they think should be there. Therefore they realized that there is a group of contradictions or gaps related to the conception of the customers from the provided services. These gaps can influence the customer's conception from the provided services. There are five types of gaps in SERVQUAL model:

Gap 1: between consumer expectation and management perception

Gap 2: between management perception and service quality specification

Gap 3: between service quality specification and service delivery

Gap 4: between service delivery and external communication

Gap 5: between expected service and experienced service

Gap 5 is the most important gap in SERVQUAL model (Parasuraman et al 1985, 13). As the Figure No.2 shows, Gaps of the SERVQUAL model is based on the expectation of the customers. It can be concluded that the main purpose of Service Quality is to satisfy the customers. The basis of SERVQUAL model is the customer's satisfaction obtained from the calculation of the fifth gap. To evaluate service quality, Parsu and his colleagues first started recognizing the factors that cause in customer satisfaction. They first recognized ten main dimensions that included all their studied services. Then they designed a questionnaire composed of 97 items to calculate the ten dimensions. Later they modified their model and reduced the ten dimensions to 5 dimensions and 97 items to 22 items. Figure No.2 shows model of service quality gaps designed by Parasuraman et al. SERVQUAL model is the very 22 items questionnaire designed by Parasuraman that considers 5 dimensions for service quality. Special studies which were conducted after 1993 and were focused on some particular industries added some other dimensions to this questionnaire; still this model is valid.

Kano Model

Traditional methods of determining service quality are bound to some limitations. One of the limitations is that the relationship between customer satisfaction level and importance of the provided services is not linear. Also in traditional methods of determining service quality, the planned quality might be more or less than the customer expectations. In this case the customer would either express dissatisfaction from the quality or his level of satisfaction remains unchanged, although the quality of the service is developed. In both cases, reaching the goals of a long-term comprehensive plan is not possible. Therefore, deep understanding of the customer needs and expectations is the prerequisite of the customer satisfaction. Noriaki Kano et al designed a model of service quality to tackle this problem (Berger et al, 1993). The basis of this model is the double-factors model of Herzberg (motivation and hygiene factors) (Witell et al, 2007). Kano categorized needs of the customers as must-be, one dimensional and attractive and then showed the three needs in a tow dimensional diagram. The vertical axis is the level of the customer satisfaction and the horizontal axis is the feature implementation (required quality presupposed by the customer). Top and bottom of the vertical axis show satisfaction and dissatisfaction of the customer. Junction of the two axes represents a state in which the customer is in a balance, concerning satisfaction and dissatisfaction. Right side of the horizontal axis shows the delivery point where the product does not have the expected quality and the must-be quality is not included. Kano in this model shows three features of the products that influence customer satisfaction, if implemented

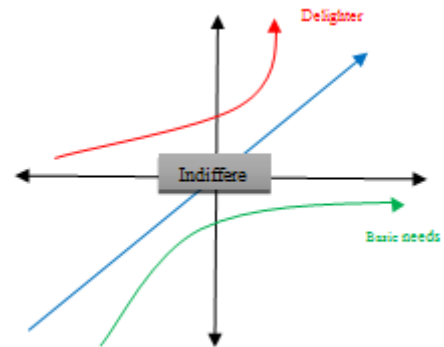


Figure 3. Kano Model

Kano model is also used to categorize and prioritize needs of the customer. Its advantage is that the needs of the customers are not the same and they each individual has different needs. Results of this method can be used to arrange the tasks done for satisfying the customer. Kano model can also be used to recognize types of the customers based on the relative priority of the needs. A questionnaire with two questions can be used to categorize the customer needs, based on Kano model. In fact for each service feature one negative/positive question is put and the customer chooses 5 choices to answer each question. By comparing the negative and positive answers of the customer, a table is drawn (Kano Table) and type of the quality (must-be, one dimensional, attractive) is categorized based on the comparisons.

Comparing the responses in Kano evaluation table, qualities can be categorized as follows

A: Attractive

M: Must-be

O: One-dimensional

I: **Indifferent:** which means the customer is indifferent to the quality of the product or service.

Table 1. Original model and refined model of the five assessment dimensions of Parasuraman et al

Original Model	Refined Model
Tangibility	Tangibility
Reliability	Reliability
Responsiveness	Responsiveness
Competence Courtesy Credibility Safety	Guarantee
Access Communication Understanding the user	Empathy

Table 2. Scale of Kano

CRs		DYSFUNCTIONAL				
		1. like	2. must-be	3. neutral	4. live with	5. dislike
FUNCTIONAL	1. like	Q	A	A	A	O
	2. must-be	R	I	I	I	M
	3. neutral	R	I	I	I	M
	4. live with	R	I	I	I	M
	5. dislike	R	R	R	R	Q

A = Attractive M = Must-be R = Reverse
O = One-dimensional I = Indifferent Q = Questionable

Source: Berger et al. (1993)

Table 3. T-test results of perception and expectations regarding tangibility of service quality

Test Result	T Paired Comparison Test	T Value	Meaningfulness	Perception Average	Expectations Average	Degree of Freedom
Rejected H0	5.888	1.645	0.000	3.14	3.62	144

Therefore there is a meaningful relationship between the expectations and perception of the customers regarding tangibility.

Table 4. T-test results of perception and expectations regarding reliability of service quality

Test Result	T Paired Comparison Test	T Value	Meaningfulness	Perception Average	Expectations Average	Degree of Freedom
Rejected H0	3.127	1.645	0.002	3.30	3.48	144

Therefore there is a relationship between the expectations and perception of the customers regarding reliability.

Table 5. T-test results of perception and expectations regarding responsiveness of service quality

Test Result	T Paired Comparison Test	T Value	Meaningfulness	Perception Average	Expectations Average	Degree of Freedom
Rejected H0	6.246	1.645	0.000	3.05	3.70	144

Therefore there is a relationship between the expectations and perception of the customers regarding responsiveness.

Table 6. T-test results of perception and expectations regarding guarantee of service quality

Test Result	T Paired Comparison Test	T Value	Meaningfulness	Perception Average	Expectations Average	Degree of Freedom
Rejected H0	3.993	1.645	0.000	3.29	3.50	144

Therefore there is a relationship between the expectations and perception of the customers regarding guarantee.

Table 7. T-test results of perception and expectations regarding empathy of service quality

Test Result	T Paired Comparison Test	T Value	Meaningfulness	Perception Average	Expectations Average	Degree of Freedom
Rejected H0	8.276	1.645	0.000	3.29	3.50	144

Therefore there is a relationship between the expectations and perception of the customers regarding empathy. It can be observed that there are meaningful relationships between perception and expectations of the customers of Aseman Airliner in different dimensions.

Table 8. The results of prioritization of the services quality improvement criteria

Quality Criteria	Gap	Class	Synthesized Kano-SERVQUAL	Priority
Staff motivation for helping the passengers	-0.64	M	Very Important	1
Attention and empathy of the staff toward every single customer	-0.58	M	Very Important	2
Easy access to the branches	-0.57	M	Very Important	3
Appearance of the staff	-0.56	M	Very Important	4
Modern technologies	-0.43	M	Very Important	5
Lack of the sense of loss from the provided services	-0.41	M	Very Important	6
Providing services at the appointed time	-0.37	M	Very Important	7
Empathy and interest for solving the problems	-0.27	M	Very Important	8
Flawless record keeping of the passengers	-0.23	M	Very Important	9
Gradually giving sense of confidence to the passengers	-0.22	M	Very Important	10
On time flights/ without delay	-0.12	M	Very Important	11
Online ticket reserve/purchase services	-0.02	M	Very Important	12
Providing detailed info about flight situation	+0.01	O	Important	13
Sufficient time for handling passengers issues	-0.79	O	Partly Important	14
Understanding particular needs of each passenger	-0.65	O	Partly Important	15
Passengers knowing the time of the service provision	-0.59	O	Partly Important	16
Providing amusing magazines and brochures	-0.53	O	Partly Important	17
Working hours of the company being appropriate	-0.46	O	Partly Important	18
Having attractive and beautiful physical features	-0.41	O	Partly Important	19
Good knowledge of the staff for responding to the passengers questions	-0.34	O	Partly Important	20
Having a secure schedule for recognizing passengers	-0.34	O	Partly Important	21
Full performance of the service at the first time	-0.14	O	Partly Important	22
Quick service provision	-0.60	A	Less Important	23
Attention to every single passenger	-0.46	A	Less Important	24
Flight time SMS	-0.28	A	Less Important	25
Courtesy of the staff	+0.06	M	Less Important	26
Efficient transport of passenger and luggage.	0		unimportant	27

Some sources propose omitting customer needs with indifferent quality in the later steps on the analysis.

Q: questionable: which means the questions were asked inappropriately, the customer didn't truly understand the question or he responded poorly.

R: Reverse: which means the customer is too indifferent toward the quality and is totally reluctant to comment about the quality of the product. Generally quality is the drawback of the questionnaire (Han et al, 2001).

Research Questions

1. How is evaluation and ranking of services quality criteria based on the combination of KANO and SERVQUAL model in Iran Aseman Airline?
2. What are criteria of services quality based on the SERVQUAL model in Iran Aseman Airline?
3. What are customers' needs and wants based on the KANO model in Iran Aseman Airline?
4. What are the main criteria of services quality based on the combination of KANO and SERVQUAL model in Iran Aseman Airline?
5. What is prioritization of services quality improvement criteria in Iran Aseman Airline?

Research Methodology

The study is a practical one because findings of the research can be used as suggestions for Aseman Airliner and other airliners to improve their service quality. Research method is descriptive-survey. It is descriptive because it analyzes and describes the current situation and is survey because it measures the performance deviation through survey. Population of the research is all the passengers who came to Aseman Airliner Company for air services from 21st March 2010 to 23rd September 2010. Total number of the population is 170 persons who were chosen randomly.

Findings

Out of 170 distributed questionnaires, 25 were incomplete and could not be used for data analysis. There were totally 145

questionnaires whose analysis became the basis of this study. As mentioned before, the first research question is related to SERVQUAL model; According to SERVQUAL model, what are the service quality criteria of Aseman Airline?

In this study the population is indefinite and the population size large ($n=170$), therefore Student's t distribution should be used to test the hypotheses. The questionnaire is related to two interconnected averages, that is perception and expectation of the customers and the other variable is service quality of an airliner, therefore paired comparison is used to test the hypotheses.

There is no meaningful relationship between the perception and expectations of Aseman Airliner customers from service quality of the flights.

There are 5 secondary hypotheses that should be tested:

1. There is no meaningful relationship between the perception and expectations of the customers regarding tangibility.
2. There is no meaningful relationship between the perception and expectations of the customers regarding reliability.
3. There is no meaningful relationship between the perception and expectations of the customers regarding responsiveness.
4. There is no meaningful relationship between the perception and expectations of the customers regarding guarantee.
5. There is no meaningful relationship between the perception and expectations of the customers regarding empathy.

T-test is used by paired comparison to analyze the hypotheses

$$H_0 : \mu_1 = \mu_2$$

$$H_1 : \mu_1 \neq \mu_2$$

Results of the hypotheses tests are as following Synthesizing SERVQUAL and Kano Model

Table No. 7 presents the prioritization of service quality criteria in the synthesized model of SERVQUAL and Kano. Prioritizing of service quality criteria of Kano model (Basic needs, Performance needs, Delighters) is done according to the

way they influence the customer. Basic needs become the first priority because if they are not met lead to the dissatisfaction of the customer. Prioritizing of service quality criteria of SERVQUAL model is done according to the service gaps. Negative gaps become the first priority. Positive and zero gaps (which show that the needs of the customer are met) remain unchanged.

Conclusions

Findings of the research (from testing the hypotheses) show that there is a meaningful difference (gap) in the perception and expectation of Aseman Ariline passengers concerning SERVQUAL factors (tangibility, responsiveness, guarantee, empathy, reliability). That is to say that the expectations of the passengers are not met and the company had a poor performance in all dimensions of the service quality. Prioritizing of the gaps in expectations and perceptions are as follows:

1. Responsiveness
2. Empathy
3. Tangibility
4. Guarantee
5. Reliability

Findings of Kano model show that 27 features of service quality are distributed in three classes of basic, performance and delighters. 14 cases were included in basic needs, 10 in performance and 3 in delighters. Synthesize of the two models show that basic needs with negative gap should be given the first priority because if they are not met causes deep dissatisfaction of the customers. The synthesized model also showed that motivation of the staff for helping the passengers is the first priority and efficient transport of passenger and luggage is the last priority. For sealing the gaps it is suggested that a comprehensive research be conducted among different groups of the customers. It is also suggested that an auditory system be established so that feedbacks about service quality is collected. Synthesizing the two models is an efficient approach for changing the priority of the customer needs. It also helps the service integration design of the company. The company can

distinguish between the customers and find the target customer through this approach. It can also focus on the needs which seem to be of more importance to the customers and seals the gaps. The approach helps the company to maintain a good position in market and secures a competitive advantage.

Note:

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