

Studying Customer Satisfaction of Mashhad Airport Customs Based on Kano and Servqual Models

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Abstract

Over the past two decades, developed countries were shadowed by moving toward service-based economics, which is recently affecting developing countries. Due to such transformation, scientific parties became interested in and managers tried to increasingly recognize effective factors of quality of service (QoS) and customer satisfaction. The present study made efforts to cover each model weaknesses using strengths of the other through integrating the two well-known models of Kano & Servqual. The survey was conducted at Customs of Mashhad Airport trying to identify customer satisfaction effective factors. 120 questionnaires were randomly distributed among the customs' clients. The effect of SERVQUAL model dimensions on client satisfaction was identified using five research hypotheses; next, each dimension was classified in one of the three requirement categories of KANO model; then, the relationship between factors of quality of service model with the requirements was examined. Research result revealed that more than 50% of changes in dependent variable (satisfaction) are explained by quality of service model components and 75% of changes in customer satisfaction were predicted by functional and motivational requirements. Moreover, There was seen a significant relationship between

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quality of service model components and Kano functional and motivational requirements. Finally, some suggestions are recommended to improve the organization quality of services and to advice for future research.

Keywords: Kano model, Fundamental requirements, Functional requirements, Motivational requirements, Service quality model, Customer satisfaction.

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Introduction

Organizations are established to meet the needs of environment. One of the most important environmental factors is customers. If organizations can provide, maintain, or increase customer satisfaction, they will be successful. Therefore, pioneer organizations always seek for ensured customer satisfaction (Husseini Hashemzadeh, 2009; 64). As they found out that the most desirable and successful product would never be demanded if customers' needs and expectations are not met (Arabi and Esfandiari, 2003; 2).

But most organizations do not really know how to identify, prioritize, and meet these requirements. On the other hand, there are always some limitations including supplying required resources considerably influence decisions and performances (Spencer, 2000 51). In this regard, any organization must use tools to identify customer needs and to prioritize them according to the needs significance (Tan & Theresia, 2001, 420).

According to service nature requiring customer presence in the process of service delivery, one of the ways organizations increase their competitive power is to enhance goods quality and services regarding customers' needs. Despite the fact that customs is a governmental organization with a monopoly nature, it is not excluded. Iranian customs organization, in particular airport customs, like any other organization, delivering services to the customers, requires to assess customer satisfaction or dissatisfaction degree of received services, to identify their expectations and perceptions and ways of customer satisfaction, and to meet their needs in order to improve customer relationship and customer satisfaction. Therefore, this research intends to study customer satisfaction effective factors and to classify them in Kano requirements.

Theoretical basics and literature review

SERVQUAL model

Quality of service conceptual model was firstly introduced by Parasuraman, Zeithaml and Berry in 1985 presenting a concept named quality of service gap using Gap Analysis Model to identify and measure customer satisfaction effective factors in banking industry in India (Parasuraman et al, 1988 ;16). They initially identified ten effective factors in quality of service respecting to customer and service provider; the factors were obtained

during interviews with sessions called "focus group" (Nowacki, 2005; 237). Revising the basic model, researchers classified the ten factors into five dimensions: "tangibility, reliability, responsiveness (accountability), assurance, empathy factors" and provided a tool for measuring quality of service known as SERVQUAL model named after service quality (Seyed Javadin and Kimassi, 2005; 79). The mathematical model of service quality score is as follows:

$$SQ = W_i (P_i - E_i)$$

Kano model

Noriaki Kano, professor at Rica Tokyo University and one of the most prominent management science scholars, inspired by the hygiene stimuli in Herzberg two-factor model (motivational and hygiene factors), relatively modified concept of quality as hygiene stimulus (Witell and Lofgren, 2007; 55). Kano model is a theory of product development and customer satisfaction developed (Babaei, 2006)

Kano, in the model, divided product or service features into three categories regarding how customer demands are satisfied and showed them by a two-dimensional graph (Golchinfar, 2002; 3-4). The requirements include: 1) essential requirements, 2) functional requirements, and 3) motivational requirements.

Essential requirements (basic): Essential requirements are primary features of any product if not met customers will be totally dissatisfied; otherwise, they merely prevent customer dissatisfaction rather than any satisfaction (Matzler and Hinterhuber, 1998; 28).

Functional requirements (one-dimensional): Customer satisfaction, in this typical feature, is proportional to the level of meeting. The higher the level of the features is, the more customers are satisfied, and vice versa (Ibid, 28- 29).

Motivational requirements: are product criteria largely influence customer satisfaction of the product. Supplying the features causes highly-satisfied customers; while, failure to meet may result in no customer dissatisfaction (Ibid, 29).

Research conceptual model

Although, the above-mentioned models were used in many studies, it is necessary to mention that they were also criticized and several weaknesses were also mentioned in addition to the strengths. So, in this research, the researcher tried to reduce weaknesses as much as possible using simultaneously Kano and SERVQUAL models. Therefore, it is necessary to identify strengths and weaknesses of each models used in the research. In the following, models' advantages and disadvantages are shortly described.

Kano model advantages

The benefits of the model contain better understanding of the features of goods and services, prioritizing customer satisfaction effective factors, distinguished organization

regarding motivational requirements, applying Kano model in market segmentation strategies, and efficient in goods production process (Sauerwein et al, 1996; 314-315).

Kano model weaknesses

Lack of quantitative or qualitative performance evaluation of product features, lack of described customer behavioral intentions, as well as how perceptions are established are of the model disadvantages (Tan and Therasia, 2001; 420).

SERVQUAL model advantages

Strengths of SERVQUAL model are as follows: identifying strengths and weaknesses of quality of service, specifying service gaps (Tan and Therasia, 2001; 419), providing a benchmark and assessment scale, ranking service quality dimensions, tracking customer expectations and perceptions from the organization (Donnelly et al., 2006; 97), evaluating internal quality of service, comparing organization quality of service with rivals (Parasuraman and Zeithaml, 2008; 42).

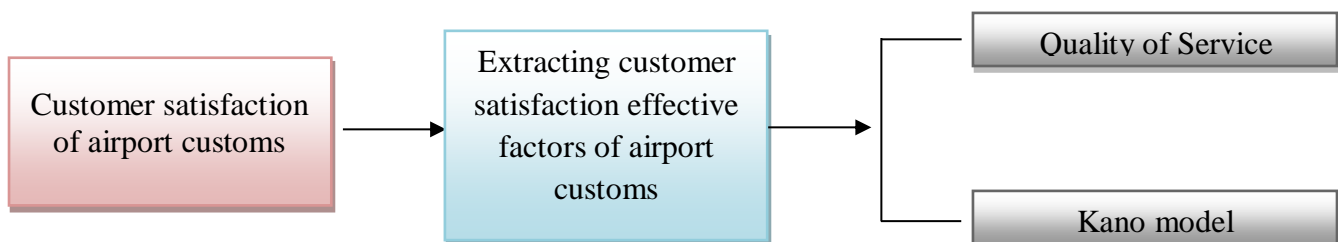
SERVQUAL model weaknesses

Absence of model innovation, general and non-universal model dimensions, inadequacy of gap measurement in the model for prioritizing customer needs, considering the linear relationship between customer satisfaction and service features, operationalizing the concept of perceived quality are considered as SERVQUAL model weaknesses (Tan and Theresia, 2001; 419-420).

Certainly, simultaneous using of Kano and SERVQUAL models may bring many benefits some are mentioned from scholars' perspective as follows:

1. Resolving the problem of lack of SERVQUAL model innovation advantage.
2. Resolving the issue of linear SERVQUAL model.
3. Solving gap calculation problem in quality of service Model (SERVQUAL).
4. Solving the issue of feature performance non-evaluation in Kano model (Ibid; 421).

Therefore, according to the aforementioned and regarding the conducted studies a, research conceptual model is presented as follows:



The conceptual model applied two standardized quality of service and Kano models for data collection. To implement the service quality model (SERVQUAL) at airport customs and to localize, model components were adjusted.

Research hypotheses

H1: Dimensions of quality of service model (tangibility, reliability, responsiveness, assurance, empathy factors, and other factors) influence customer satisfaction of airport customs.

H2: The three requirements of Kano model (essential, functional, and motivational) influence customer satisfaction of airport customs.

H3: Dimensions of quality of service model have a significant relationship with Kano model essential requirements.

H4: Dimensions of quality of service model have a significant relationship with Kano model functional requirements.

H5: Dimensions of quality of service model have a significant relationship with Kano model motivational requirements.

Research objectives

- 1- To determine the effect of quality of service model dimensions on customer satisfaction of airport customs.
- 2- To determine the effect of Kano model three requirements (essential, functional, and motivational) on customer satisfaction of airport customs.
- 3- To determine the relationship between dimensions of quality of service model with three requirements of Kano model.

Research methodology

Since the present research describes understudied circumstances and phenomena to get more knowledge of the existing conditions and to aid in decision-making process, it is of descriptive studies regarding data collection method. And, as research results are useful for improving airport customs quality of service, it is considered an applied research in terms of purpose. Respecting research methodology, it is a descriptive-analytical research due to using statistical correlation test, Friedman test, regression analysis, and student t- test.

Research statistical population included travelers, tourists, and all visitors and users of customs services at Mashhad airport. Research sample was selected using a simple random sampling method through following formula: (Azar and momeni, 2006; 76)

$$n = \frac{Z^2 \times pq}{\varepsilon^2}$$

$$n = (1.96)^2 \times (0.25) / (0.09)^2 = 118.57 \approx 120$$

Validity and Reliability

Validity and reliability are the features that each measurement tools including the questionnaire should have. The research used standard Kano and SERVQUAL models to identify and adjust the questionnaire parameters. To localize the questionnaire, some customs experts and university professors were interviewed and asked to comment on questionnaire parameters. Then, the 23- item questionnaire was agreed. Accordingly, the questionnaire validity was verified using content validity. Research questionnaire reliability was verified using Cronbach’s alpha, which was obtained 78% through SPSS. Given that Cranach’s alpha coefficient is larger than minimum (0.7), is concluded that the questionnaires are optimally reliable.

Research findings

Initially, demographic composition of the respondents is studied. Table (1) shows the frequency and relative frequency of the respondees’ gender, age, education, and the number of abroad trips variables.

Table 1: Respondees’ demographic variables

		Frequency	Relative frequency
Gender	Male	98	82
	female	22	18
Age	21 to 31	50	41
	31 to 40	39	33
	41 to 50	23	19
	Up to 50	8	7
Education	No degree	10	8
	High school degree	36	30
	Associate degree	14	12
	Bachelor	18	32
	Master degree and higher	21	18
The number of abroad trips	1-5	57	47.5
	5-10	17	14.2
	10-15	2	1.7

	More than 15 times	39	32.5
Total		120	100

Once demographic variables, and frequency and relative frequency of respondees were examined, research hypotheses were tested using inferential statistics, which are summarized in the following.

Research first hypothesis studies the effect of quality of service model dimensions on customer satisfaction. It is tested using multiple regression method. In order to use this method to test the hypotheses, researcher requires ensuring that the dependent variable is normal. So, normality of the dependent variable is firstly tested expressing a hypothesis:

- H₀**: The dependent variable (satisfaction) is normally distributed.
- H₁**: The dependent variable (satisfaction) is abnormally distributed.

To test the hypothesis, Kolmogorov–Smirnov test method is used.

Table 2: Kolmogorov–Smirnov test

Sample size = 120	
Normal parameters	Mean -21/2 Standard deviation 9.82
Largest difference boundaries	Absolute 0.066 Positive 0.066 Negative -0.046
Kolmogorov–Smirnov z significance level	0.725 0.669

As seen in Table (2), test statistics is 0.725 and significance level equals 0.669, which is greater than 0.05. Therefore, it can be stated that H₀ is maintained at confidence level of 95%. In other words, the satisfaction variable is normally distributed. Thus, considering normality of the dependent variable, hypotheses are tested using multivariate regression method.

- H₀**: Dimensions of quality of service model (tangibility, reliability, responsiveness, assurance, empathy factors, and other factors) do not influence customer satisfaction of airport customs.
- H₁**: Dimensions of quality of service model (tangibility, reliability, responsiveness, assurance, empathy factors, and other factors) influence customer satisfaction of airport customs.

As previously stated, the aforementioned hypothesis was tested using multivariate regression model.

Table 3: Regression model outputs

model	R Correlation coefficient	R ² Coefficient of determination	Adjusted R ²	Standard deviation of estimated value
1	0.709	0.503	0.476	7.107

In this hypothesis, satisfaction is the independent variable and service quality dimensions are considered independent variable. The correlation of the two variables was measured by regression equation; as seen in Table (3), $R^2 = 0.503$ (coefficient of determination), it may be expressed that 50.3% of the dependent variable changes are indicated by the model.

Table 4: One Way ANOVA

Model	Sum of squares	Degree of freedom	Mean squares	F	Sig.
Regression	5769.664	6	961.611	19.037	0,000
Remainder	5707.822	113	50.512		
Total	11477.486	119			

A: Predictors: fixed, other factors, empathy, tangibility, reliability, assurance, responsiveness B:
 Dependent variable: satisfaction

As shown in Table 4, test statistics was $F = 0.077$ and $Sig = 0.00$; hence, it is inferred that the regression model is generally significant, and H_0 is rejected. In other words, at least one of the independent variables has significant effect on dependent variable. In the following, to determine the effect of service quality dimensions on satisfaction and to provide regression model, the model coefficients are presented in the table 5:

Table 5: Regression coefficients

Model	Non-standardized factor		Standardized factor Beta	T-value	Sig.
	B	Standard error			
Fix value	-68.229	5.717	-	-11.934	0.000
Tangibility	5.499	1.271	0.345	4.328	0.000
Reliability	0.329	1.51	0.019	0.218	0.828
Responsiveness	3.431	1.377	0.261	2.493	0.014
Assurance	0.109	1.355	0.008	0.080	0.936
Empathy	2.091	1.466	0.126	1.426	0.157
Other factors	4.32	1.549	0.199	2.789	0.006

Dependent variable: Satisfaction

As seen in Table 5, significance level for fixed value, tangibility, responsiveness, and other factors was less than 0.05. In other words, it is deduced that satisfaction effective dimensions include tangibility, responsiveness, and other factors. Thus, regression model can be written as follows:

$$\text{Other factors (4.32) + Responsiveness (3.431) + Tangibility (5.499) + 68.229 = customer satisfaction}$$

Research second hypothesis investigates the effect of Kano model dimensions on customer satisfaction.

H₀: Kano model dimensions (essential, functional, and motivational) do not influence customer satisfaction at airport customs.

H₁: Kano model dimensions (essential, functional, and motivational) influence customer satisfaction at airport customs

The hypothesis was tested using multivariate regression model.

Table 6: Regression model outputs

Model	R	R ²	Adjusted R ²	Estimated value of standard deviation	Durbin-Watson statistics
1	a.0872	0.760	0.754	4.87	
2	b.0.871	0.759	0.755	4.861	0.303

A: Predictors: Functional, essential, Motivational

B: Predictors: Motivational, Functional

C: Dependent variable: Satisfaction

According to analysis results in Table 6, the adjusted coefficient of determination for the first model was 0.754; while, in the second model, eliminating essential factor, the adjusted coefficient of determination obtained 0.755 indicating model improvement. Differently, it may be declared that %75.5 of changes in customer satisfaction is explained by motivational and functional factors.

As shown in Table 7, F=122.633 and the Sig = 0.000 for the first model, and F = 184.370 and the sig=0.00 for the second model reveal that the regression model is generally significant and t H₀ is rejected. Otherwise, at least one of the three requirements of Kano model has a significant effect on customer satisfaction.

Table 7: One way ANOVA

Model	Sum of squares	Degree of freedom	Mean squares	F	Sig.
1					
Regression	8726.103	3	2908,701	122,633	A, 0.000
Reminder	2751.383	116	23,719		
Total	11477,486	119			
2					
Regression	8712,910	2	4356,455	184,370	B,0.000
Reminder	2764,576	117	23,629		
Total	11477,486	119			

A: Predictors: Functional, essential, Motivational

B: Predictors: Motivational, Functional

C: Dependent variable: Satisfaction

In order to determine the effect of Kano model dimensions on satisfaction and to present the regression model, model coefficients are presented in the following table:

Table 8: Correlation Coefficients

Model	Non-standardized factor		Standardized factor	T-value	Sig
	B	Standard error	Beta		
1 Fixed value	-189,04	12,614	-	-14,986	0.000
Functional	19,763	3,814	0.390	5,182	0.000
Essential	-0,955	1,28	-0,034	-0,746	0.457
Motivational	18,079	2,580	0,528	7,008	0.000
2 Fixed value	-193,248	11,261		-17,161	0.000
Functional	19,648	3,804	0.388	5,165	0.000
Motivational	18,273	2,572	0.530	7,066	0.000

Dependent variable: Satisfaction

According to the aforementioned table, it is inferred that given the significance level of essential requirements is larger than 0.05 ($0.457 > 0.05$), it can be stated that it has no significant effect on customer satisfaction. However, both factors of functional and motivational requirements, in both models, significantly influence customer satisfaction of airport customs' service quality received ($\text{Sig} < 0.05$). Therefore, the regression model is formulated as follows:

$$\begin{aligned} & (\text{Motivational Requirements}) 18.173 + (\text{Functional Requirements}) 19.648 + 193.248- \\ & = \text{Customer Satisfaction} \end{aligned}$$

Once the effect of understudied components was identified on customer satisfaction, this paper tries to study the relationship between service quality model components and

Kano model requirements. For this purpose, three hypotheses are presented below and tested.

The relationship between the quality of service dimensions with Kano model the essential requirements

H₀: Dimensions of quality of service model show no significant relationship with Kano model essential requirements.

H₁: Dimensions of quality of service model show significant relationship with Kano model essential requirements.

To test the hypotheses of the relationship between components of service quality model and Kano three requirements, Pearson correlation coefficient was used.

Table 9: Pearson correlation coefficient test results between quality of service and essential requirements

Pearson Correlation Coefficient	Tangibility	Reliability	Responsiveness	Assurance	Empathy	Other factors
Essential requirements	-0,073	-0,199	-0,092	-0,095	-0,0199	-0,086
Significance level	0,429	0,029	0,316	0,303	0,196	0,350
Number of samples	120	120	120	120	120	120

According to Table 9, it is concluded that none of service quality model dimensions show significant relationship with essential requirements excluding reliability (0.05 > 0.029). Pearson correlation coefficient of the relationship is - 0.199. Therefore, it can be argued that there is an inverse relationship between reliability and essential requirements.

The relationship between the quality of service dimensions and Kano model functional requirements

H₀: Dimensions of quality of service model show no significant relationship with Kano model functional requirements.

H₁: Dimensions of quality of service model show significant relationship with Kano model functional requirements.

Table 10: Pearson correlation coefficient test results between quality of service and functional requirements

Pearson Correlation Coefficient	Tangibility	Reliability	Responsiveness	Assurance	Empathy	Other factors
Functional requirements	0,433	0,425	0,538	0,561	0,457	0,429
Significance level	0,000	0,000	0,000	0,000	0,000	0,000
Number of samples	120	120	120	120	120	120

Table 10 illustrates the relationship between dimensions of service quality and functional requirements. As observed, considering that the significance of level of service quality components is less than 0.05, it can be concluded that there is a significant relationship between the dimensions and functional requirements. On the other hand, because of the positive correlation coefficient, this relationship is direct and positive

The relationship between quality of service dimensions and Kano model motivational requirements

H₀: Dimensions of service quality model show no significant relationship with Kano model motivational requirements.

H₁: Dimensions of service quality model show significant relationship with Kano model motivational requirements.

Table 11: Pearson correlation coefficient test results between quality of service and motivational requirements

Pearson Correlation Coefficient	Tangibility	Reliability	Responsiveness	Assurance	Empathy	Other factors
Motivational requirements	0,552	0,584	0,649	0,560	0,448	0,433
Significance level	0,000	0,000	0,000	0,000	0,000	0,000
Number of samples	120	120	120	120	120	120

In Table 11, the relationship between quality of service dimensions and motivational requirements was investigated. As seen, given that the significance level of all service quality components is less than 0.05, it is concluded that there is a significant relationship between the dimensions and motivational requirements. This means that it is a direct positive relationship because of the positive correlation coefficient.

Once research main hypotheses were tested, the question raised to the researcher was the priority of service quality model dimensions from customer point of view. For this purpose, Friedman ranking test was used. Research data analysis using this method is presented in Table 12. Accordingly, it is inferred that airport customs showed the maximum performance in empathy and the minimum performance in other factors than other dimensions.

Table 12: Customer perception

Dimensions of quality of service model	Mean ranking
Empathy	4,79
Reliability	4,29
Responsiveness	4,10
Assurance	3,94
Tangibility	2,16
Other factors	1,73

During research process, the researcher was interested in the effect of understudied components on customer satisfaction and dissatisfaction. So, the question was answered by using Kano method. The results are summarized in Table 13.

Table 13: Prioritizing the effect of components on customer satisfaction and dissatisfaction (based on Kano model)

Factor	Satisfaction
Q1	0.00
Q6	0.03
Q22	0.06
Q16	0.06
0	0
0	0
0	0
Q4	0.69
Q10	0.71
Q3	0.86
Q17	0.94

Factor	Dissatisfaction
Q1	-1,00
Q22	-1,00
Q7	-1,00
Q8	-0.97
0	0
0	0
0	0
Q18	-.057
Q10	-0.56
Q19	-.017
Q17	-0.14

Findings of Table 13 show that components of items 1, 22, 7, and 8 mostly influenced customer dissatisfaction, respectively; components of items 17, 3, 10, and 4 had the highest effect on customer satisfaction, respectively.

Finally, the researcher tried consider customer expectations and airport customs performance. In this regard, the following hypothesis was presented and analyzed using paired sample t- test.

H₀: Customer expectations of quality of delivered services do not exceed airport customs performance.

H₁: Customer expectations of quality of delivered services exceed airport customs performance.

Table 14: Statistical factors of quality of service

Variable	Mean	Quantity	Standard deviation	(SEM)
Service quality(perceptions)	3,20	120	0,440	0,040
Service quality(expectations)	4,39	120	0,350	0,032

Table 14 shows that customer mean expectations of quality of services delivered by airport customs are generally more than their perceptions. For detailed investigation and testing the hypotheses, paired Sample t- test was used. The results of the data analysis by paired sampling method are shown in Table 15.

Table 15. Results of the data analysis by paired sampling method

Paired differences							
Mean	Standard deviation	Difference distance with 95% confidence level		Calculated T	Degree of freedom	sig	Test result
		lower boundary	upper boundary				
-1,18	0,530	-1,27	-1,09	-24,45	119	0,000	H0 Rejected

Test statistics and significance level reveal that customer expectations were more than the perceptions at 95%. In other words, customs performance in service quality was lower than customer expectations.

Discussion and Conclusion

As research results demonstrated, quality of service model dimensions influence customer satisfaction of airport customs. In other words, 50.3% of the changes in customs clients' satisfaction are explained by service quality factors. The results are consistent with many studies like Hosseini Hashemzadeh, 2009; Tan and Theresia, 2001; Jamal and Naser, 2002, and Jamali, 2007. To say it differently, many scholars around the world believe that the quality of services provided by different organizations affects customer satisfaction.

Further, research findings uncovered that two dimensions of Kano model (functional and motivational) influence customer satisfaction of airport custom, too. In other words, at 95% confidence level, motivational requirements and functional requirements are significant predictors of customer satisfaction and 75.5% of customer satisfaction changes are explained by regression model (functional requirements and motivational requirements). According to the findings, results of the present research are consistent with the fundamental principle of Kano model that the essential factors are the factors have no impact in customer satisfaction, and if not provided, they may result in customer dissatisfaction.

Moreover, research results are also consistent with the Goli, 2007; VazifehDostust and Attaalehi, 2007; Sireli, 2003; as well as Tan and Theresa, 2001. In a better words Mashhad airport customs should firstly make every efforts to reduce dissatisfaction factors, which are indeed the very essential factors; and secondly, pay adequate attention to motivational and functional factors so that they are satisfied.

As earlier mentioned, essential requirements represent primary features of any typical service; and the customer, by default, assume that the organization is providing all requirements i.e. the requirements are the organization necessities that any failure may not be justified. Thus, Therefore, the inverse relationship between the reliability component and essential requirements indicates that the more the organization is reliable, the less essential requirements are interested; rather, customers more focus on functional and motivational functions.. The positive and direct relationship between components of service quality model and functional and motivational requirements indicates that providing more desired components of service quality causes increased level of customer satisfaction. In other words, approaching organization performance to customer expectations and reduced existing gap is followed by higher satisfaction of services provided by the organization. Simply, it can be said that higher level of service quality leads to greater customer satisfaction. According to research findings and based on satisfaction priority and ranking tables, it may be expressed that the lack of conformity with existing rules and regulations is viewed as one of dissatisfaction causes at airport customs. Therefore, it is suggested that, given the fact that Customs Law was approved in 1972, the necessity of reform and adaption to the current situation is taken serious.

Managerial implications

Research results show that the quality of services provided by airport customs in most understudied dimensions were evaluated low by the client. Therefore, airport customs officials should try to gradually reduce the gaps, at first step; and next, move behind customer expectations. The following measures may positively contribute in realizing the goal:

- 1- **Improved knowledge of customer:** One of the reasons for poor service quality is customer lack of familiarity with customs rules, which results in asking for the requests beyond staff authority scope. Therefore, familiarity with customs regulations can be an effective step in managing customer expectations.

- 2- **Designing service environment:** Certainly, physical evidences surrounding service are of the components influencing customer judgment. Therefore, the service environment should be designed in such a way so as effectively influences customer satisfaction.
- 3- **Staff empowerment:** procedural nature and inseparable quality of services make staff significant in service delivery. Thus, to provide high quality service, it is necessary to develop appropriate strategies in human capital. For this purpose, it is required to reform recruiting system, to improve educational programs, to evaluate and reward desired behaviors.
- 4- **Improving organizational communication:** Facilitating communications between airport customs units is another factor of reducing service gaps. Coordination between units reduces service gap. In this regard, there should be close communication between line and staff personnel
- 5- **Using modern systems in customs processes:** Obviously, providing timely and proper services is one of customer satisfaction effective factors. Evidently, mechanized systems do many things more accurately and quickly than humans. Modeling from developed countries customs, enjoying their knowledge and experience, will be effective in improving customs process.
- 6- **Planning for optimal use of resources:** Given to the limited organizational resources, if components are prioritized and individually addressed, the managers can take three major steps: 1- short-term planning; 2- middle-term planning; and 3- long-term planning (improved motivational components)
- 7- **Establishing a strong public relations unit:** In order to continuously respond to customer information needs and to provide all the required regulations, guidelines, and circulars.
- 8- **The proportion of manpower with volume of services:** Research findings exhibit that proportion of manpower with volume of services provided is one of the important factors influencing customer dissatisfaction. Therefore, if it is interested by customs officials, it would lead to improved services.

Suggestions for further research

1. It is suggested that to eliminate models' weaknesses, researchers use QFD integrated model with KANO and SERVQUAL models.
2. It is important to note the dynamic nature of service researches and various different findings are obtained depending on culture, time, nature of the organization, and etc. In other words, the components that are now presented as functional and motivational components may become the key components in future years. Therefore, proper planning for customer satisfaction demands continuous studying in this field.

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