

Analyzing and Introducing Strategies for Improvement in Quality of Services in Payam Noor University of Yasooj: From the Viewpoint of Students and Through QFD-Kano Mixed Method

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Abstract: Due to ever-increasing role of service organizations in different fields of economy and in regard to the significance of quality in competitive areas, the issue of quality can be introduced as one of the main strategic factors and key basis in competitive areas. Organizations that achieve high levels of quality retain high levels of customer satisfaction which is one of the steps for stability in competitive areas. Studies indicate that the problem in quality of services comes forth in organizations that do not concentrate on valuing customer needs and demands. Service organizations are better to put themselves in customer's shoes and set up their policies based on customer viewpoints. In regard to significant role of universities in culture, improvements in quality of services are necessary in universities, that Payam e Noor University of Yasooj is one. Customer needs and demands are various and sources are limited in the hands of organizations; thus, it is logical to consume sources in fulfilling primary requirements that may result in maximum customer satisfaction. This study aims to analyze, based on factors extracted from literature review, the present condition and favorable quality of services in Payam e Noor University of Yasooj in order to recognize gaps and lacks. Then, it introduces strategies for improvements in quality of services where there are lacks and gaps. Questionnaire and Likert Scale are used to shed light on the gaps between the present condition and favorable quality of services. Questionnaires were distributed among students of this university and the results indicated that there are gaps and lacks in all fields. Since, improvements in all fields are not feasible for the organization, this study attempts to recognize, through Kano Model, the fields in which requirements are more significant that their incompleteness may cause more dissatisfaction on the side of students. Kano questionnaire with goal-oriented sampling was distributed. The 6 criteria from 41 were recognized as requirements and they were included in QFD as student's demands. Technical necessities and practical procedures were collected and analyzed from literature review and they were preceded through AHP method. QFD results indicated that the main demand is prompt responses and privileged practice is execution of standard quality.

Key words: Quality of services, Kano, QFD, Payam e Noor university of Yasooj, consume, prompt

INTRODUCTION

The qualities of services and customer satisfaction are strategic to service organizations. Organizations should permanently record and analyze customer's needs, demands and level of their satisfaction if they want to rest assured about their success and business, since they can introduce new services and productions through observing and applying customer's demands in so doing more reception is attainable. QFD is a kind of designing service or production that its main factor is voice of customer. Organizations, through this model, keep their contact with customer and develop new production in line with customer satisfaction by the way of establishing the culture of group work in organization (Goodarzi *et al.*, 2006). Those organizations will be successful in this

rough and competitive conditions of nowadays that overtake their rivals in business by appraising customer's expectations, needs and demands. In other words, due to new approach in marketing based on customer-orientation, they concentrate on customers and analyze issues from their viewpoints. Now a days, customer satisfaction is one of the prevalent terms in business. It is attainable just through quality of services and productions in line with or even beyond customer's expectations and demands. Thus, quality is the main factor in competitions over the world and organizations have to supply qualified services and productions if they want to outrun in business (Zanjirchi and Zahra, 2008). Most of the organizations hold the necessity of permanent contact with customers and they create then systems for recording and responding to their expectations and

complaints. Employers in sale and marketing departments have to be informed about customer's satisfaction about services and productions and even changes in their needs and demands. Customer's needs, demands and level of satisfaction should be recorded and updated if any organization want to rest assured about its success and business. No doubt, satisfying and encouraging customers about quality of services require in the first step recognitions about needs and demands and then plans for services and productions based on them. It does not take place all together while economic, social and cultural systems become more and more complicated, so that it requires systematic methods and procedures to transform them into organized process. On the other hand, changes in needs, demands and expectations are undeniable; therefore, firstly it should be determined what customer demands and how it is then attainable (Mansoori and Yavari, 2003).

Nowadays only organizations are highly status that their main activity is to supply demands and satisfy customers with highly qualified services and productions. Then, efficient usage from all possibilities and utilization of new sources for more favorable and qualified services are inevitable necessities if organizations aspire to be effective and successful in local and global business. Due to ever-increasing role of service organizations in economic fields and the significance of quality in the course of competition, service organizations should manage quality of services with strategic and dynamic approach and they should have a clear perception about conditions of quality including definition, viewpoint, expectations and general characteristics. Since customers play a significant role in the process of activities in organization and they are effective on reception and stability of organization; thus, recognition of their obvious needs, prediction and setting their hidden demands and expectations and planning programs for obviating their needs with special services are essential elements for any organization (Kolai, 1997).

Generally intangibility of services, assessment of services based on the interests of suppliers, cultural differences, variances in customer expectations and heterogeneity of customers result in different attitudes on this issue in diverse studies (Baquerzadeh and Fatemeh, 2009). There are several studies on quality of service inside and outside of the country, yet the present study attempts to analyze quality of services in Payam e Noor University of Yasooj. Quality is still the first factor for mastering sale and marketing. Then, improvements in quality of services and productions in organizations and agencies are the first and primary factor in overtaking markets. There are different methods and models in this

regard that one of them is QFD (Atashsooz, 2004). The QFD method was introduced by Akao in 1960s (Cloutier and Richards, 1994). It was applied in several service industries such as educational services (Madu and Kuei, 1993; Pitman *et al.*, 1995), health and medical services (England *et al.*, 1987) and software services (Bradley *et al.*, 1995). It is about yaers that this method is used in some satte or private organizations of Iran. In a study by Kashanian and Azadi the results of utilizing this method in service or rest areas were indicated.

So, this study attempts to analyze present and favorable conditions, through effective factors in order to recognize gaps and lacks. In so doing, it introduces strategies for improvement of quality of services in Payam e Noor University of Yasooj. Yet the question is: are improvements in all gaps and lacks economical or is it better to leave some improvements for better results? Using Kano Model, the present study recognizes the more effective and necessary factors. After distributing questionnaires, the factors of the quality of services are classified to three categories that are explicated in the following. Then, the requirements of the three categories are introduced to QFD. Actually, the main issue in this study is introducing strategies for improvement of quality of services in Payam Noor university of Yasooj. Servicer should be assured about quality of services that guarantees satisfaction. In servicing, evaluating quality of services is highly important.

Due to fact that quality of services is the main factor in referring customer to service, those organizations then are successful that guarantee quality. On the other hand, universities and similar organizations are significant and effective on culture; they should consider so quality in their services in order to guarantee satisfaction. It is noted that evaluation of quality of services is more difficult than evaluation of quality of productions for both organizations and customers and this is because of the specific characteristics of services (Chen *et al.*, 2002). Since the sources authorized to organizations are limited and satisfaction is not likely and economical in all grounds, priorities should be arranged and requirements that may cause more dissatisfaction should be obviated firstly.

MATERIALS AND METHODS

Firstly, the factors of quality of services are collected through experimental literature review. Then, the present and favorable conditions are analyzed by questionnaires and the gaps and lacks are assessed by Likert ranges. It is noted that the gaps and lacks are analyzed by SPSS

Software and Wilcoxon signed-rank test. After the recognition of gaps and lacks having negative significance and for consideration of economic grounds for organization, the factors that are highly significant are selected for improvements. The selection of factors is considered through Kano Model. Thus, Kano questionnaire with goal-oriented sampling were distributed and analyzed. The more significant factors, as demands by students are introduced into QFD Model. And they are weighted and arranged in priority through Analytical Hierarchy Process (AHP). Technical necessities and practical procedures are extracted from literature review and they are classified by aforementioned method. Finally, strategies for improvement of quality of services are introduced to organization.

RESULTS AND DISCUSSION

This study aims to introduce strategies for improvement of quality of service in Payam Noor University of Yasooj. The criteria are actually expectations of students in regard to quality. These criteria are arranged in priority through AHP. Quality Function Development (QFD) is used for arranging criteria as well.

Response to the first question of the study: What are the present and favorable conditions of quality of services? Criteria for quality of services are selected in regard to literature review and advices by professors and specialists. Finally, 9 criteria are selected from 41 criteria.

Results of the study indicated that the significant of all paired data is <5 and the hypothesis of the similarity of the means is rejected. In other words, there is significant difference between the present condition and favorable condition about all factors of the study. Descriptive statistics of the factors of quality of services indicate that responsiveness has the most mean of 4.069 for favorable condition. The most significant gap among factors of the present and favorable conditions is also for responsiveness with 2.069.

Abdulvand achieved in similar results as well which means responsiveness has the most negative gap. In another study by Suo, responsiveness attained the most important factor in quality of services and it is followed by other priorities of physicality, agreement, reliability and trust. Results of study by Esmaeli (2013) are in discord with the results of the present study, since responsiveness in his study has the least gap among 9 criteria. In his study, the most recurrent gaps are about costs and physicality. In a study by Baqerzadeh and Fatemeh (2009), agreement and responsiveness have the most importance and physicality is the least

importance. In a study by Pouresphaden *et al.* (2008) also customers found responsiveness too far to achieve and education department is the weakest in this regard.

Response to the second question of the study: What are the technical necessities and student demands? The specification of student demands is attained by Kano Model. And requirements are recognized after analyzing the questionnaire. Due to importance of requirements, they are introduced into quality matrix for the sake of recognition and preparing satisfaction. Requirements that are demands and expectation on the side of students are arranged in priority as following:

- Prompt and timely responses
- Services with no deficiencies
- Responses to all questions by students
- Consideration of respect in responses to students
- Creative employees
- fulfillment of promises

Technical necessities are also classified through library research as following:

- Utilizing advanced computer equipment such as printer, computer, scanner and server
- Appropriate uniform in regard to rank
- Fulfillment of services in due time
- Receiving advices and consults in respect to official procedure
- Sufficient personnel in each section in regard to services
- Prompt and timely information
- Responsiveness where the services are supported electronically
- Electronic service development in introducing services
- Attaining trust through proper behavior by employees
- Education along with services for employees

Response to the third question of the study: What are the strategies for improvement of quality of services in regard to negative gaps? At this stage, student demands and technical necessities are introduced into quality section in order to determine their correlations. In the following, quality matrix is introduced for improvement of quality of services. Student demands and technical necessities are weighted and arranged in priority through expert choice software. The weight and rank of the factors are expressed in QFD both before and after applying correlation. It is clear that prompt and timely responsiveness is a demand

Table 1: Weight and number of the demands of customers before and after the effect of correlation in QFD

Student demands	Results before applying correlation in QFD		Results after applying correlation in QFD	
	Weight	Rank	Weight	Rank
Prompt and timely responses	0.2070	1	0.3300	1
Responses to all questions by students	0.1800	3	0.2869	2
Fulfillment of promises	0.1170	6	0.1344	3
Creative employees	0.1470	5	0.0872	4
Services with no deficiencies	0.1850	2	0.0823	5
Consideration of respect in responses to students	0.1640	4	0.0790	6

Table 2: Weight and number of technical requirements before and after the effect of correlation in QFD

Technical necessities	Results before applying correlation in QFD		Results after applying correlation in QFD	
	Weight	Rank	Weight	Rank
Education along with services for employees	0.6090	7	0.3188	1
Attaining trust through proper behavior by employees	0.0690	7	0.3188	2
Responsiveness where the services are supported electronically	0.0850	4	0.1273	3
Receiving advices and consults in respect to official procedure	0.0710	6	0.1152	4
Sufficient personnel in each section in regard to services	0.0610	8	0.0837	5
Utilizing advanced computer equipment	0.1780	1	0.0500	6
Electronic service development	0.1660	3	0.0419	7
Fulfillment of services in due time	0.1680	2	0.0379	8
Prompt and timely information	0.0530	9	0.0198	9
Appropriate uniform in regard to rank	0.0800	5	0	10

Table 3: Weight and rank practical measures before and after the effect of correlation in QFD

Technical necessities	Results before applying correlation in QFD		Results after applying correlation in QFD	
	Weight	Rank	Weight	Rank
Execution of standard quality	0.2270	1	0.2770	1
Education courses for employees	0.1950	2	0.1345	3
Financial and spiritual rewards for employees	0.1160	3	0.1046	6
Utilizing advanced computer equipment	0.1000	4	0.1857	2
Employee's emotional intelligence	0.0970	5	0.0720	5
Specific supervision of departments	0.0870	6	0.1108	4
Appropriate execution of information systems	0.0610	7	0.0388	7
Supporting the culture of cooperation	0.0450	8	0.0310	9
Presenting information brochure	0.0390	9	0.0434	8
Collecting complaints	0.0340	10	0.0001	10

by students. The figure also indicates that the ranks of factors change for before and after applying correlation (Table 1). It is noted about technical necessities that utilizing advanced computer equipment was the main technical necessity before applying correlation; however, education along with services became the main factor in student demands after applying correlation in QFD matrix. Practical procedures should be recognized and located in matrix in relation to technical necessities since they are necessary for introducing strategies for improvements in quality of services (Table 2).

Execution of standard quality, education courses for employees and financial and spiritual rewards for employees are the main practical procedures for improvement of quality of services and obviating demands by students. Since the main demand is prompt and timely responsiveness, the main technical necessity may be then education along with services for employees that can be achieved easily through practical procedure of education courses for employees. Ten practical

procedures expressed in the above figure indicate strategies the improve quality of services in organization (Table 3).

Practical suggestions for Payam e Noor University of Yasooj: Customer demands and expectations are major concerns for service organizations. This study attempted to recognize practical strategies for improvement of quality of services in order to introduce them to considered organization for improvement of its quality of services. Practical strategies for improvement of quality of services in Payam e Noor University of Yasooj are as following: execution of standard quality: organizations will achieve to favorable results and customer satisfaction if they follow their standard qualities. Education courses for employees: Payam e Noor University of Yasooj may cooperate with other universities in Yasooj and introduce to its employees the latest changes and updates in economics and trading. Financial and spiritual rewards for employees: financial and spiritual rewards may motivate

employees for proper behavior with customers and also it is effective on their prompt and timely responses to students which are their main demand. Utilizing advanced computer systems: they facilitate and accelerate services and procedures that increase satisfaction on the side of students in regard to services.

Employee's emotional intelligence: appropriate behaviors in every kind of situations are related to emotional intelligence that can be enhanced by study and practice. Specific supervision on departments: supervision has been a point in improving employee's efficiency. Supervision by those in charge of departments can be positively effective on employee's efficiency. But supervision is better to be indirectly.

Appropriate execution of information system: information system also should be advanced and adapted to improvements in order to be effective on speed and accuracy of services. Supporting the culture of cooperation: group-works, team-works and cooperation of employees in groups are highly efficient that entail with positive results.

Presenting information brochure: a number of dissatisfactions on the side of students are for their lack of awareness and information about rules and terms in organization. Organization may solve this problem through brochures and bulletins on website or panels about required information or events ongoing. Collecting complaints: responsiveness to customers is necessary in any organization in order to be aware about and obviate complaints and dissatisfactions.

CONCLUSION

Results of the study indicated that there are negative gaps in all fields. Due to reason that improvement in all fields and factors is not economical, Kano questionnaire with goal-oriented sampling was designed and distributed. 6 factors of 41 factors were recognized necessary and they were introduced into QFD as student demands. Technical necessities and practical procedures were collected and analyzed from literature review and also they were arranged in priority through AHP. Results of QFD indicate that the main demand by students is prompt and timely responsiveness and the main practical procedure is execution of standard quality that improves quality of services.

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