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Analysis Electronic Service Quality through E-S-Qual Scale: The Case Study of Nowshahr Hotel

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Abstract: The aim of this study is to analyze the electronic service quality in Arsh Hotel which is located at Nowshahr city using Kano and E-S-Qual scale. All Given the importance and position of electronic hotel service and the growing trend of electronic hotel services in the country in recent years, now is the financial and credit institutions and banks have found a good position to maintain and develop effective strategies without the utilization of scientific and practical management Information and communication is not possible. Today, hotels in order to remain competitive need to improve the quality of its electronic services to the linear view of this topic are not comprehensive_. In order to study integrated model E-S-Qual and Kano is used that with removal the linear hypothesis is. In the first step towards electronic service quality factors based on the Arsh Hotel E-S-Qual model to determine the current practice of banks and provide the service expectations of customers and their vision of electronic service quality mentioned has been evaluated. In the first step factors towards electronic service quality the Arsh Hotels based on E-S-Qual model to determine the current practice of hotels and provide the service expectations of customers and their vision of electronic service quality mentioned has been evaluated. Considering the gap between customer expectations and current practice of hotels in providing these services, services to the two categories is divided into weak and strong. In the second step of research with integrating E-S-Qual and Kano model, service quality factors based on Kano model classified to determine which features of electronic service quality determined by the model E-S-Qual and evaluated, is the strategic importance in relation to customer satisfaction.

Keywords: E-S-Qual, hotel, Kano model, services

INTRODUCTION

Quality is the collection of features and specifications of the product or service that is able to meet the explicit or implicit requirements. In most definitions, customer satisfaction and meeting of their demands is the most important factor. Customer satisfaction is: considering the amount of customer requirements that have been meeting. Zeithaml said that; service is the collection of apparent and hidden benefits and advantages that engender by using the facilitating goods and supporting equipment (Zeithaml, 2000). From Parasuraman opinion, service quality, is the size and direction of the difference between customer's perceptions and expectations of service (Parasuraman *et al*., 2005). With the rapid growth of internet and globalization of markets, most institutions often are in seeking to attract and capture customers in the competitive electronics market. Electronic services importance not only is increasing in success or failure of electronic commerce application, but also in a good channel reservation service with interaction of information flow in exchange processes (Santos, 2003). One of the options of government for improving the quality of service and the transformation of it, is using the ICT and electronic government. Electronic government is referred to provide government information and service through the instantaneous internet or other digital tools. Electronic government can provide some of the main goals for the public sector, including TQM, customer oriented, empowering communities, workers and customers and the effectiveness and efficiency (Teicher *et al*., 2002). The main channels and electronic media also is the same organization's web site that all the service is offered by it. Here, service quality measurement comes out from the physical environment and organization structure and inter to the world of web sites, that is, virtual world. So, with this big change in the way of delivering service, certainly the methods of assessment will change and new indicators for measuring and evaluating this type of service are required. Another point that increases the

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importance of assessment of services quality is that every so often we are seeing organizations claim of becoming electronic and electronic services in their organization. Measuring the electronic service quality in the public sector can help us to review this claims. Offering and delivering online service is very different than traditional service that is based on mutual information flow between customers and service providers. Electronic service quality not only having the potential of providing strategic advantages, but also considered to increase operational efficiency and profitability takes (Zeithaml, 2000). Electronic services are crucial even for companies to attract and maintain customers. Online customer's experience for web site of companies is a sense of loyalty that through good service of company comes into existence. Oliveria *et al.* (2002) suggest that, companies can achieve competitive capabilities from providing services through appropriate electronics customers and quality of delivering service has a stronger impact on customer satisfaction on firm performance. The importance of the quality of electronic services by Zeithaml (2002) has been accentuated. They claimed that removal electronics' service quality gaps lead to customer satisfaction which increases the value of e-SQ, purchase and repurchase received. Most conducted studies are in the field of dimensions, evaluation and characteristics of electronic service quality. Implementation of strategic quality management program requires a clear understanding of organizational attitudes of service quality, customer expectations, perceived quality, quality measures and major determinant of quality. Recognition of the above mentioned point is necessary for improving the quality of services but not sufficient, but need to conceptual model that help management in identifying the deficiencies and planning for implementing of the quality of improvement program strategy (Ghobadian, 1994). For investigate and identify the factors affecting on service quality from customer view there is a little consensus and there is various models for evaluating quality of services, like hysteresis models, Kano, Servqual, Web-qual, QFD, etc. In this respect, objective of this study is to evaluate the quality of electronic service by using Kano model and E-S-QUAL models. For implementation of this goal, the quality of electronic services in the hotel industry has been evaluated and the electronic hotel services of Arsh Hotel have been studied. This paper is organized as following steps that at first review the literature of electronic services, electronic service quality and evaluating service quality and each Kano, E-S-QUAL models. Then in the next section the research methodology will be introduced. After familiarity with research methodology, results of each analysis of the models is presented separately. Finally concluded from the study will be presented.

LITERATURE REVIEW

Electronic service quality: By increasing in demand for electronic commerce in organizations, the importance of evaluation and monitoring service quality in electronic virtual world become more and more. Various studies have done to develop the evaluation of indicators in the field of service quality (Table 1). In Table 1, examples of studies about electronic services, including areas for research and dimensions of the quality of electronic services are listed. It is evident that the most of these studies is guided mainly in three different areas: online sales service quality, quality of website design and online service quality. In fact, quality of web site design and quality of online sales, both of them are the important components of quality of online services (Cristobal *et al*., 2007).

One of the first definitions of service quality was introduced by Zeithaml *et al*. (2000). They stated that the quality of internet services, where the web site facilitate the sales, purchasing and on time delivering of goods or services is extended. Zeithaml (2002) extended the dimensions of E-S-QUAL and also compared the dimensions of E-SERVQUAL with ES-QUAL. They stated that, some aspects of SERVOUAL

Table 1: The results of E-S-Qual analysis

Number	E-S-Qual dimensions	Avg. of performance	Avg. of expectations	Distance	Electronic service quality
1	Reliability	3.30	3.10	+0.20	Strong
2	Responsiveness	3.25	3.62	-0.37	Week
3	Access	3.57	3.92	-0.35	Week
4	Flexibility	3.40	3.80	-0.40	Week
5	Ease of navigation	3.46	3.36	+0.10	Strong
6	Efficiency	3.00	3.35	-0.35	Week
7	Assurance/trust	3.96	4.00	+0.40	Strong
8	Security/privacy	4.21	4.26	-0.05	Week
9	Price knowledge	3.88	4.15	-0.27	Week
10	Site aesthetics	4.06	3.74	+0.32	Strong
11	Customization/personalization	3.65	4.23	-0.58	Week

Avg.: Average

dimensions can be used in electronic service quality, but there is some traditional aspects in electronic services that most of them often have relations, especially with the technology and the ES-Qual scale was included 11 dimensions that after the Parasuraman *et al*. (2005), ES-QUAL were developed to 7. These 7 dimensions are divided in two separate sections-core dimensions and improvement and recycling dimensions. ES-Qual is the name of scale for core dimensions: performance, availability, system performance and latency. Second scale is named, as ERecSQUAL: Sensitivity, compensation and interaction (Parasuraman *et al*., 2005).

In this regard, the apparent dimensions of electronic service quality have been proposed based on customer experience and evaluation viewpoints that considered the admission arrangements of electronic services (Rowley, 2006). Most studies on electronic services are the combination of traditional service quality dimensions and the dimensions quality which is related to web. Dabholkar explained his research work in the quality of electronic services and web site design based on seven aspects of quality of electronic services as fundamental parameters in judging the quality of electronic services (Dabholkar, 1996). Donthu and Yoo (1998) developed an indicator called SITEQUAL for evaluating the quality of the service lines, which consists of the following four dimensions: the ease of use, beautiful design, processing speed and sensitivity interaction. Cox and Dale (2001) launches 6 aspects of selling services on line's quality with compared to traditional service quality dimensions. Wolfinbarger and Gilly (2002) developed an electronic service quality scale that at first COMQ and later was called as advanced eTailQ. Lociacono *et al*. (2002) developed a scale of service quality called WEBQUUAL which is composed of 11 dimensions. According to the subject of study, E-S-QUAL scale is selected for evaluating. Recently, research on electronic service quality, shows different dimensions of electronic service quality.

Santos (2003), Yang and Fang (2004), Long and McMellon (2004), Gounaris *et al*. (2005), Lee and Lin (2005), Kim *et al*. (2006) and Madu and Madu (2002) developed 15 dimensions of the electronic service quality based on better understanding of customer's perspective and providing services in accordance with customer needs and experiences.

E-S-Qual dimensions: Zeithaml *et al*. (2000) study identified dozens of Web site features at the perceptual attribute level and categorized them into 11 e-SQ dimensions:

- **Reliability:** Correct technical functioning of the site and the accuracy of service promises (having items in stock, delivering what is ordered, delivering when promised), billing and product information
- **Responsiveness:** Quick response and the ability to get help if there is a problem or question
- **Access:** Ability to get on the site quickly and to reach the company when needed
- **Flexibility:** Choice of ways to pay, ship, buys, search for and return items
- **Ease of navigation:** Site contains functions that help customers find what they need without difficulty, has good search functionality and allows the customer to maneuver easily and quickly back and forth through the pages
- **Efficiency:** Site is simple to use, structured properly and requires a minimum of information to be input by the customer
- **Assurance/trust:** Confidence the customer feels in dealing with the site and is due to the reputation of the site and the products or services it sells, as well as clear and truthful information presented
- **Security/privacy:** Degree to which the customer believes the site is safe from intrusion and personal information is protected
- **Price knowledge:** Extent to which the customer can determine shipping price, total price and comparative prices during the shopping process
- **Site aesthetics:** Appearance of the site
- **Customization/personalization:** How much and how easily the site can be tailored to individual customers' preferences, histories and ways of shopping

Kano model: In most of the previous definition about quality, like Herzberg's definition, quality is linear and one dimension in nature. But in 1970, professor Kano with some others of Japanese's assistants developed their Kano model to define service quality in the context of customer needs and rejected the traditional view and introduces quality as a two-dimensional. Compliance parameters of service quality performance and customer satisfaction in tow dimensional axis have caused that the definition of quality become more complex. Thus, Kano *et al* provided three required clause for services that when they are fulfilling, effects on customer satisfaction in a different methods. These clauses include: essential features and a single and attractive features. Essential features are necessary but are not sufficient clause customer satisfaction. If single features are exist, the customer's satisfaction is provided and the absence of it, causing dissatisfaction. So, it can say about the one dimensional features that, if the quality of perceived services becomes higher, customers' satisfaction will increase and vice versa. Attractive features are that if there exist, customers are satisfied and vice versa. In fact attractive services

features have the most affection on the level of customer's satisfaction in services area (Carpinitti *et al.*, 2003). Kano analysis is one of the quality measurement tools for prioritizing customer demands based on their impact on customer satisfaction and satisfaction. Kano analysis helps different customers to determine the requirements which have higher priorities (Cheng and Chiu, 2008). Kano model improves understanding of the requirements of product or service.

RESEARCH METHODOLOGY

Since this study describe the conditions and phenomena for further understanding of situation and also help the decision-making process, can be considered descriptive studies and because the desired data collected from sampling, it can be called survey study. On the other hand the present study, according to the goals, is an applicable study. This study is conducted at Arsh hotel, located in Nowshahr city at the north of Iran, in 2012. Population of this study is the customers of Arsh Hotel in Iran that use the electronic hotel services. Sampling in this study is randomly-clustered. So, some of them have been choose as a cluster in countries and then 150 samples randomly selected and the questionnaires were given to them. In this study for assessing the validity of two questionnaires, after the initial design and consultation with teachers and experts in electronic hotel industry, the necessary reforms was carried out and the final form of the questionnaire were identified. To test the reliability of questionnaires, 30 questionnaires considered as a pre-test and used alpha test as the most important and prevalent instruments for measuring the questionnaire that the amount of it for first questionnaire was 75% and 87% for the second questionnaire, indicating that research questionnaires have high credibility.

CASE STUDY

The first step in this research is to determine the factors of service quality in strategic section of Arsh Hotel based on E-S-Qual model. In this study, after study the resources related to the quality of electronic services and consultation with experts of electronic hotel industry, by using the 11 dimensions of Loiacono's *et al* model (Lociacono *et al*., 2002), quality of electronic hotel service of Arsh Hotel was evaluated. In order to determine the strong and weak characteristics of the quality of electronic hotel service of Arsh Hotel, 150 customers that use electronic hotel services randomly selected and questionnaire was distributed among them to present their evaluations about the current electronic service and their expectations about the quality of this service. This analysis can be seen in Table 1.

After collecting data and analyzing them as can be seen in the Table 1, customers determined four characteristics of " Reliability ", "Ease of navigation", "Assurance/trust" and "Site aesthetics" that there is a strong positive difference between current performance and customer expectations and it means that customers have been satisfied from the quality of four features of service. In 7 other features, there is a negative difference between current performance and customer expectations, indicating that there is a lack of customer's satisfaction from the quality of these features. Position of the quality of electronic service of Arsh Hotel based on the evaluating of E-S-QUAL model revealed that the customers were not satisfied from the quality of electronic service. The second phase of research, is classification of service quality based on the Kano model. For this purpose a questionnaire that includes Kano scales was distributed among the Arsh Hotel customers of electronic services. This analysis is shown in Table 2.

After collecting data, each characteristics of service quality which respondent determined, has been investigated through frequency rate. As Matzler and Hinter Haber have suggested that the simplest method for evaluation is the frequency of response. Thus, in defining of categories of service feature, each group that having the highest frequency among the four categories, is classified as an indicator of service

Table 2: The results of Kano analysis

Number	E-S-Qual dimensions	Attractive	One dimensional	Necessary	Indifferent	Total	Type of service
1	Reliability	30	78	26	16	150	One dimensional
2	Responsiveness	25	47	44	34	150	One dimensional
3	Access	43	64	26	17	150	One dimensional
4	Flexibility	80	44	7	19	150	Attractive
5	Ease of navigation	47	56	30	19	150	One dimensional
6	Efficiency	15	61	46	28	150	One dimensional
7	Assurance/trust	20	43	65	22	150	Necessary
8	Security/privacy	23	12	71	44	150	Necessary
9	Price knowledge	19	38	43	50	150	Indifferent
10	Site aesthetics	69	55	10	16	150	Attractive
11	Customization/personalization	77	54	5	14	150	Attractive
	Number of defined attributes of service quality in each category	3	5	2	1		

quality. For example in service of number 10, among total 150 numbers, 69 numbers considered it attractive, 55 numbers considered it one dimensional, 10 numbers considered it necessary and 16 numbers were indifferent. Since a larger number of customers (69 cases) introduced this feature as an attractive feature, so “Site aesthetics “feature as the feature considered as an attractive feature. Similarly, other features are classified. As can be seen in the last line of Table 2 features of the 11 features of electronic service quality were classified as "attractive", 5 features of electronic service quality were classified as an “one dimensional”, 2 features of electronic service quality were classified as an "Necessary" and 1 remaining features were classified as "indifferent", that are relevant to satisfaction or dissatisfaction customers regardless of whether the quality is achieved or not.

CONCLUSION

According to the mechanism process and increasing of private sector in the field of hotel services in Iran which in turn create various opportunities and threats for public services enterprises, it is proper for agencies that by using new management tools, maintain their ability of competitiveness and then they can take the maximum opportunity and equipped their against possible and potential threats. The difference between customer’s expectations and customer’s perception of the product or service determined the satisfaction of customers .Based on this definition and by using the E-S-QUAL model, evaluated the customer’s satisfaction from the quality of services which offered by Arsh Hotel in Iran. In fact, the position of the quality of electronic service of Arsh Hotel evaluated by E-S-QUAL model and the results showed that the customers were not satisfied from the quality of services which offered by Arsh Hotel. In the next step by using the Kano Model, classified the quality of electronic service and the results showed that based on customers comments, from 11 features, 3 features are attractive. However, the companies for gaining competitive privilege and customer’s satisfaction should focus on attractive quality features than necessary or one dimensional feature. Thus, the main focus of this study is to improve the related process of attractive features of service quality. Since, in this study, 3 characteristics were determined as attractive features, therefore corresponding internal processes for improving must be selected. Then in the next priority, corresponding processes with attractive features for improving have been elected. Moreover, service organizations to improve their service quality are faced with problems and barriers which some of them are originated from the nature of services (Ghobadian, 1994).

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