The Impact of E-Services Quality on Customers E-Loyalty

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Abstract

Nowadays, by introduction of computer to human lives along with development of internet, all governments have paid specific attention to services according to the latest teaching and technical methods and scientific advances in the world; so that, the impact of these changes is more visible in everyday life of people. Regarding the importance of internet in presentation of services and products, governments have also turned toward widespread use of internet to offer better services. For this reason, the role of e-services and its quality is very important. This study aims to consider the effects of quality of e-services on e-loyalty of customers. To do this, a statistical random sample was selected including 170 customers of Digikala website, and data was gathered by means of questionnaire. SPSS18 and AMOS20 software were also used to analyze data and to test hypotheses. Results show that the quality of e-services has a positive and significant effect on e-loyalty of customers of Digikala.

Keywords: Quality, Quality of Services, E-Services, E-Loyalty, customers.

Introduction

Expanded changes of today's world and globalization require a different and new method to offer services in order to fulfill organizational goals by optimal use of human and material resources and assets, and to develop capacities and use of them. Rapid changes in environment, industry, customers, clients, competitors, colleagues, products and services are forces that affect the organization and make essential the need to superiority (Singh, 2008:97). Meanwhile, understanding the environment and developments and knowing opportunities, threats, limitations and facilities as requirements of new organizations (Taghavi, 2010:33) are not possible through traditional approaches of management (Montes et al, 2005:1159). Given that customer-orientation is replaced with product-orientation and great efforts have been made in order to improve the quality of products and services for more customer satisfaction, the success of organizations to reach predefined goals can be considered based on delivery of services according to customer reviews and their loyalty (Gheytani and Khalili, 2013:1).

Large organizations, today, hold a specific position for customers and incorporate needs and loyalty of customers in their programs. Customers are final judges for quality of products and services and their viewpoints may resolve many problems of organization. If customer is satisfied by services and this satisfaction lead to loyalty, it can be said that organization has respected and respects its customers; so, the quality of services offered by the organization must be evaluated to consider the level of satisfaction and loyalty. Given the role of internet to offer services and products, organizations have made extensive use of internet in modern world. Although this technology is still in its youth, but enjoys many flexible functionalities such as high potential to decrease costs, to increase profit, to expand availability of materials and to remove distances. On the other hand, perhaps bureaucracy and administrative difficulties are among the greatest complexities

in Third World countries, during which less attention is paid to the quality of services (Jafari, Yaghoobi and Salarzaei, 2014:153).

Given the importance of e-services and its effects on e-loyalty of customers, and also given that most organizations in Iran have neglected it, this paper tries to consider the effects of the quality of e-services on e-loyalty of customers to develop and elevate function of websites, and to offer some suggestions to make websites more efficient and to increase their proficiency if possible. Findings of this study will represent benefits and advantages of e-services and its effects and consequences on function of websites to create necessary motivation and attention. The findings can also lead to better recognition of the concept of e-services, its substructures, processes and its effects on the quality of e-loyalty of customers.

A Review on Literature

This study analyzes effects of quality of e-services on e-loyalty of customers. At first, we overview the quality of e-services briefly and then, we consider e-loyalty of customers separately. At the end, we review interrelations among these sections.

The Quality of E-Services

Appearance of information and communication technology is one of the basic changes in today's societies having great advantages. Undeniable advantages of information technology to increase accuracy and speed of workflow, to increase global quality, to decrease costs and to increase customer satisfaction have enabled organizations to establish and use information and communication systems as fast as possible (Zarkalam, 2012:129). The introduction of IT (information technology) to the field of services has changed service environment referred to which as e-services. According to Rust and Kannan (2002) e-services means to provide services in the context of electronic networks such as internet including services provided by service organizations and products made by manufacturing organizations – their success depends on the quality of their services.

According to Salaun and Flores (2001) e-services is beyond giving an order, replying questions and sending emails. In fact, e-services make a different experience for customers from interactive flow of information. How information are understood and used and what information customers need or intend to receive play an important role in quality of information in e-service process (Piri and Ebrahimi Lame, 2013).

In service organizations, quality takes place during the service process and encounter between customer and service provider. Service quality management is a main challenge for service provider organizations due to distinct features of services, because heavy investments and high volume of organizational activities may lose their efficiency under poor quality of services. Quality of services is followed by higher capability of organization to provide services for visitors in an efficient manner, because organization understands requirements and needs of customers and consequently, decreases or removes unnecessary services (Ahmadizad, 2010:25). Since quality of eservices has a significant impact on loyalty of customers and function of organizations, too many studies have been done about its criteria and features. The outcome of these studies is models by which, researchers assess the quality of e-services according to their study goals.

After reviewing the literature of quality of general e-services, "e-qual" model was selected in this study based on quality function deployment system, a tool to identify and deliver the voice of customer at each stage of development and application of service or product. Measures and dimensions of this model are represented in table 1.

Table 1: Measures and dimensions of e-qual model

Dimensions	Components				
Usability	Easy-to-learn website to use				
-	Transparent communication with the site Easy-to-browse website				
	Easy-to-use website				
	Apparent attractiveness of website				
	Standard design of website				
	Competence for operation				
	Transparent communication with the site				
	Easy-to-browse website				
	Easy-to-use website				
	User mentality after website use				
Quality of information	Accuracy of information of website				
	Reliability of information of website				
	Updated information of website				
	Related information of website to its functions				
	Easy-to-understand information of website				
	Detailed information of website				
	Suitable format of website				
Interacting services	General profile of website among people				
_	Secure services of website				
	Secure personal information				
	Relationship between website and contacts				
	Respect for users				
	Role of e-services in the relationship between users and organization				
	Truthfulness and accountability of authorities to offer suitable e-services				
	practically				

E-loyalty of Customers

Loyalty is customer desire to continue to buy from a store. Loyalty to a brand and repurchase refers to rather biased behavioral response in buying over the time toward a brand. This behavior leads people toward a special brand among a set of brands and names during decision making and assessment process. This reaction is a function of psychological and mental processes of people (Ahmadi, Jafarzadeh, Bakhshi-Zadeh, 2014:65). Repetitive buying the same brand or a series of same brands is caused due to situational factors and marketing efforts effective on behavioral changes (Mehrabi, 2014:10). Increased loyalty to a brand may make income streams predictable for customers and may increase incomes over the time (Tajzadeh and Emadi, 2011:91).

Loyal customers help organization define predictable stream of sales and increase profit. Moreover, customers who are familiar with trade name of organization most likely recommend it to their friends and family and be effective in feedback and evaluation cycle, the process which has a critical role in today's business environment (Hosseini, 2012:169). Customer loyalty to a brand leads to positive word-of-mouth promotion, creation of substantial barriers against competitors, strong organization to reaction against competitive threats, increased sales and income and decreased customer sensitivity to competitors' marketing efforts (Ngai, Tao, Moon, 2015:33).

Loyalty is measured in this study based on some components such as repeated purchase and introduction of e-store to friends.

Conceptual Model

Regarding study title and literature, conceptual model of this study considers the effects of quality of e-services.



Figure 1: Conceptual Model

Hypotheses

- 1- The quality of e-services has a significant effect on e-loyalty of customers of Digikala website.
 - 1.1- Usability has a significant effect on e-loyalty of customers of Digikala website.
- 1.2- Quality of information has a significant effect on e-loyalty of customers of Digikala website.
- 1.3- Interaction of services has a significant effect on e-loyalty of customers of Digikala website.

Research Methodology

This study has an applied goal and descriptive—correlative nature. Statistical sample of study consists of customers of Digikala website. Sample size includes 170 people. Questionnaires used in this study include two parts. The first part includes demographic variables such as gender, age and income. The second part is attributed to specific variables of study. Grading scale for each question is set as 1 for "never" and 5 for "always". Expert and approved individuals confirmed the validity of content of questionnaires. Cronbach's Alpha was used to define reliability of test. For this purpose, an initial sample including 50 questionnaires were distributed. Cronbach's Alpha was calculated by means of achieved data. The value of Cronbach's Alpha was calculated as 0.82 for all questions related to the variables in the conceptual model, the amount that is acceptable for this study.

Results

In the first step, measuring Patterns are getting fit. Patterns fit indices are presented in table 2:

<u>Ta</u>	ible 2: N	<u> 1easuri</u>	ing patte	rns 'I	l'otal l	Indices	
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e-loyalty o	of	Interaction of	Quality of	usability	quality of e-	Structure
customer		services	information		services	Indicator
2.10		2.46	1.20	2.11	1.89	CMIN
0.059		0.061	0.07	0.053	0.12	P
0.90		0.92	0.93	0.90	0.95	GFI
0.06		0.04	0.02	0.06	0.03	RMR
0.95		0.94	0.95	0.93	0.97	CFI
0.07		0.06	0.03	0.08	0.05	RMSEA

Measurement patterns are fit suitably and in other words, they confirm total indices that data support patterns in an appropriate manner.

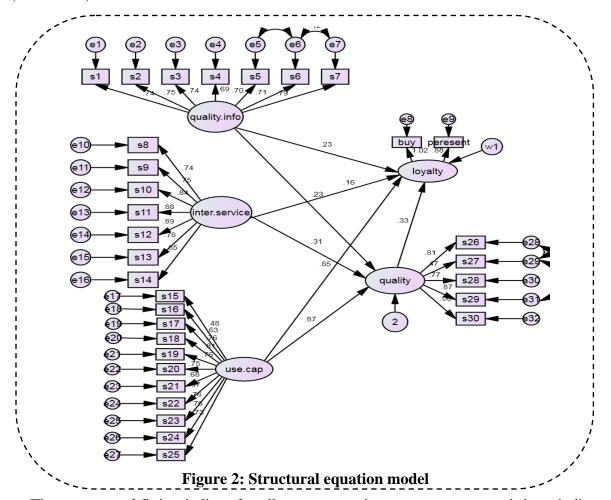
After consideration and confirmation of measurement pattern in the first step, structural equation modeling has been fitted and analyzed to test hypotheses in the second step. Total indices to fit models are represented in table 3.

Structural equation modeling has been fitted and analyzed to test hypotheses of study. Total indices to fit models are represented in table 3.

Table 3: Model fitting indices

indices	CMIN/df	RMSEA	GFI	AGFI	NFI	CFI	IFI	RMR
Main model	2.76	0.07	0.91	0.90	0.93	0.95	0.95	0.05
Acceptance area	>1	< 0.08	>0.90	>0.90	>0.90	>0.90	>0.90	close to
	<3							zero

The output results show that route analysis model is a suitable model. The amount of normal Chi-Square is between 1 and 3 for models. The amount of RMSEA is less than 0.08 that is suitable. The amount of GFI and AGFI and also three indices of NFI, CFI and IFI are near to and more than 90%; and at last, the amount of RMR is near to zero.



The amounts of fitting indices for all patterns are in acceptance area and these indices are getting models fit in a suitable manner. Gathered data support patterns very well. Table 4 represents the hypothesis with its regression coefficient and component index.

Table 4: Hypothesis test results

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Test result	Regression	Sig. No.	Sample size	Hypotheses					
	coefficient								
Confirmed	0.33	0.000	170	e-loyalty	\leftarrow	Quality of services			
Confirmed	0.87	0.000	170	Quality of services	\downarrow	Usability			
Confirmed	0.31	0.000	170	Quality of services	\downarrow	Quality of information			
Confirmed	0.23	0.000	170	Quality of services	\downarrow	Interaction of services			
Confirmed	0.85	0.000	170	e-loyalty	\leftarrow	Usability			
Confirmed	0.16	0.000	170	e-loyalty	\leftarrow	Quality of information			
Confirmed	0.23	0.000	170	e-loyalty	\leftarrow	Interaction of services			

(resource: output of Amos software)

Discussion

The results obtained due to considering study hypotheses show that:

- 1- Quality of e-services has a significant effect on e-loyalty of customers of Digikala website. Route analysis results showed that quality of e-services with 0.33 coefficient is effective on e-loyalty of customers of Digikala.
- 1.1- Usability has a significant effect on e-loyalty of customers of Digikala website. Route analysis results showed that usability with 0.85 coefficient is effective on e-loyalty of customers of Digikala.
- 1.2- Quality of information has a significant effect on e-loyalty of customers of Digikala website. Route analysis results showed that quality of e-services with 0.16 coefficient is effective on e-loyalty of customers of Digikala.
- 1.3- Interaction of services has a significant effect on e-loyalty of customers of Digikala website. Route analysis results showed that quality of e-services with 0.23 coefficient is effective on e-loyalty of customers of Digikala.

Given the results obtained from total model of study, all four hypotheses are confirmed. Namely, it is concluded regarding analyses performed by researchers that loyalty of customers to eservices of Digikala is affected by their understanding of quality of information, usability and interoperability of services. Of course, all variables considered in this study are not able to describe all changes in loyalty of customers. It means that there are other factors and variables effective on loyalty of customers to e-services, but there is not this possibility to check all these effective factors and variables due to research limiting factors. This may provide an opportunity for researchers to perform further and complementary studies. It may be said about necessity and importance of this study that the growing trend to use information technology and its application in e-services has been very important in other countries including developed and developing ones, and application of IT in the form of e-services and e-government may play an important role in growth and development of country; because self-sufficiency and independence of each country is founded based on service organizations. Moreover, the model used in this study may be extended to other societies. Of course, validity and reliability of the model must be considered and calculated in new societies because eservices are being expanded in today's Iran, and it requires endeavor of Iranian organizations and companies to consider effective factors on elevation of such these services and at last, loyalty of customers. Most Iranian organizations do not pay much attention to customer loyalty to their eservices and encounter great deficiencies. At last, we offer some suggestions for further researches:

- 1- Considering effective factors on loyalty of customers to e-services in manufacturing sector in Iran.
 - 2- Considering effective factors on loyalty of customers to e-services in other service sectors.

- 3- Comparative study of customer loyalty to e-services in public and private sectors.
- 4- Considering development of technological infrastructures in e-services in Iran.
- 5- Considering effective factors on acceptance of websites of organizations by customers.
- 6- Considering and introducing some methods to reflect comments and suggestions of customers to improve services of websites of organizations and taking advantage.

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