

9<sup>th</sup> International Strategic Management Conference

## Which dimensions affect private shopping e-customer loyalty?

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### Abstract

The Internet currently plays an important role as a business medium. In recent years in Turkey, e-commerce uptake has accelerated rapidly. As the number of people who shop online continues to grow, so too does the need to understand why and how users choose to shop online rather than in traditional channels. This naturally leads to the increase in research being conducted around gaining a better understanding of how to facilitate the future of e-commerce. It can be said that two of the most important aspects of e-commerce are e-service quality and e-service recovery. The main purpose of this research was examining the effects of the dimensions of e-service quality and e-service recovery on customer e-loyalty. This study intends to understand the e-service quality and recovery of Internet companies from the consumer perspective, by identifying the main factors that are able to predict the e-loyalty of consumers. Furthermore, the study identifies the influence of the individual dimension of e-service quality and e-recovery on service loyalty. As a result of analysis, one of the sub dimensions of service quality efficiency and sub dimensions of e-service recovery contact are the most important factors affecting e-loyalty. Online retailers are provided with tactical strategies on how to immunize online shoppers' loyalty against switching behavior.

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Selection and peer-review under responsibility of the International Strategic Management Conference.

*Keywords:* E-service quality, e-service recovery, e-loyalty

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## 1. Introduction

The Internet currently plays an important role as a business medium. Recently, in Turkey, the use of e-commerce accelerated. As this percentage continues to rise, so does the need to understand why and how users choose e-commerce instead of traditional shopping. This also leads to the increase in research to get a better understanding of how to facilitate future of e-commerce. It can be said that one of the most important feature of e-commerce is e-service and e-service quality. Although there are many ways to define e-commerce, in this research, we are going to use the definition by Grandon and Pearson (2004): the process of buying and selling products or services using electronic data transmission via the Internet and the www.

According to the definition, e-commerce provides many benefits to both sellers and buyers, and due to these advantages of the online business model over the traditional, the expectations around e-commerce are increasing. There is, however, a problem that exists, in that although some firms have successfully achieved tangible improvements in e-service quality by integrating e-commerce into their activities (Brynjolfsson and Kahin, 2000), not all firms have been successful around e-service quality. It is necessary to determine the right conditions and facilitating or inhibiting factors during the transition from existing traditional system to online service (Teo, Wei, and Benbasat, 2003). Consequently, continuous research has been conducted to investigate why some firms have been successful more than others. First, some studies emphasize the influence of e-service quality factors such as reliability, confidentiality, customer service quality, responsiveness, online system quality, accuracy, security / privacy, and customer service competence. Teo and Ranganathan (2004) examined several environmental factors that facilitate e-commerce adoption by identifying the major differences between e-commerce firms and traditional offline firms. For instance, prominent examples of success in e-commerce often describe firms offering products that are standardized and/or deliverable electronically (Poon and Joseph, 2001). Finally, further research focuses on issues such as website features, ease of navigation, system availability, suggestions for relevant links, etc. They insist that user acceptance of e-commerce depends highly on customer satisfaction, which is affected by the nature of web-based applications and that of offline marketing activities (Ahn, Ryu, and Han, 2004).

As the e-commerce industry has already reached a certain level of maturity, recent research has shifted its focus from macro issues to micro issues. Particularly, as more products / services are traded via the online channel, it is worth investigating the product / service characteristics that facilitate e-commerce adoption. Most research has been confined to only tangible products. However, with the advancement of information technology (IT), plenty of services in the physical marketplace are now shifting to the online marketplace.

In this research, we introduce a theoretically constructed and empirically verified model for identifying the relevant factors that may affect e-service quality. This model, depending on the e-service quality features, can be used to predict to what extent e-service quality affects the level of customer loyalty. Though a great deal of offline functions can be technically replaced by online functions, there is still limitations as to the specific type of service offerings because customers are reluctant to use them through online channel, which explains why some offline trading has been the more preferred business medium (Cho and Park, 2002). Therefore, this paper focuses on the customer's satisfaction while using e-commerce when purchasing services, which is a necessity condition for success of online

service providers. In our research model, our dependent variable has been identified as e-loyalty, our independent variables identified as e-service quality and e-recovery.

The next section presents the literature review, which is then followed by a section wherein the research model and hypotheses are discussed. This is then followed with a discussion, where a conclusion is reached. The final section offers implications for researchers and practitioners and provides future directions for research.

## **2. Literature Review and Hypotheses**

### *2.1. E-service Quality*

Both concepts of e-service and e-service quality have become increasing important issues in research. E-service is different from traditional service, which is based on interactive information flow between customers and service providers. E-service quality has been regarded as having the potential not only to deliver strategic benefits, but also to enhance operational efficiency and profitability. E-service is becoming even more critical for companies to retain and attract customers. What brings online customers back to company's websites is a sense of loyalty that comes from a high level of service offered by companies. Oliveria et al. (2002) suggest that companies can achieve competitive capabilities by offering good e-services to customers. Service quality has a strong impact on customer satisfaction; improving e-service quality to satisfy and retain customers is becoming a challenging issue (Li and Suomi, 2009).

*H<sub>1</sub>: E-service quality has a positive effect on e-loyalty*

### *2.2. E-Recovery*

Service recovery refers to those actions taken by an organization in response to a service failure (Grönroos, 1990) in order to change customers' dissatisfaction to satisfaction (Bell 1994) and ultimately to retain those customers (Miller et al., 2000). Management should support service recovery in the organization, since poor or ineffective service recovery implies that the customer is let down for a second time. This could result in customers spreading negative word-of-mouth communication, defecting from the organization for a competitor (Lewis and McCann, 2004), or rating organizations lower than they would have immediately after experiencing the failure (Maxham, 2001). Service failures and the subsequent service recovery efforts of an organization can have a profound effect on customers' satisfaction with an organization as well as on the quality of the relationship with the organization, despite other efforts by the organization to build long-term relationships with its customers. Considering the problem statement, objectives and literature review, service recovery has an impact on customer loyalty.

*H<sub>2</sub>: E-recovery has a positive effect on e-loyalty*

### 2.3. E-Loyalty

E-Loyalty is the customers' favorable attitudes toward an electronic business, resulting repurchasing behavior (Anderson and Srinivasan, 2003) The advent and growth of "Business to Consumer" (B2C) e-commerce has magnified the importance of building a loyal visitor base to an e-commerce website (e-loyalty). Most B2C e-business models have relied initially on an intensive effort to generate a large enough customer base and subsequently on achieving profitability based on "lifetime revenue potential" from each loyal customer (Porter, 2001). Generally speaking, loyalty implies satisfaction, but satisfaction does not necessarily lead to loyalty. Consequently, there is an asymmetric relationship between loyalty and satisfaction (Waddell, 1995; Oliver, 1999). This phenomenon is particularly important in e-marketplaces, since (dissatisfied) customers face a greater variety of choices. Through extensive research, Baldinger and Rubinson (1996) have validated that highly loyal buyers tend to stay loyal if their attitude towards a brand is positive. In addition, the ability to convert a switching buyer into a loyal buyer is much higher if the buyer has a favorable attitude towards the brand (Gommans, Krishnan and Scheffold, 2001).

## 3. Methodology

### 3.1. Research Instrument

The primary objective of this article is examining the effects of the dimensions of e-service quality and e-service recovery on customer e-loyalty. Data for this research was collected through a questionnaire survey. The e-service quality, e-recovery and e-loyalty statements were developed by Parasuraman and Zeithalm (2005). In the questionnaire, 5 point Likert scale "1=Strongly Disagree" to "5=Strongly Agree" was employed to measure e-service quality and e-service recovery on customer e-loyalty. The English version of the questionnaire was translated into Turkish by a research assistant proficient in both English and Turkish. The translated Turkish questionnaire was further verified by the three authors of this paper (who are also proficient in both English and Turkish).

### 3.2. Sampling and data collection

Data for the study was collected from online shoppers of two of the most popular retailer sites (Trendyol and Markafoni) in Turkey. During a two week period, 200 respondents completed the survey. After sorting and removing duplicate submissions, a net sample of 178 usable questionnaires remained. A total of 99 (55.6%) of the participants were female and 79 (44.4%) were male. The average age was 29.34 years (with a 5.86 standard deviation), ranging from 16 to 52 years. Data obtained from questionnaires will be analyzed through the IBM SPSS statistical packet program.

## 4. Analysis

### 4.1. Factor Analysis

To identify and test the underlying structure of the scales, exploratory factor analyses (EFA) were employed to e-service quality, e-service recovery, and e-loyalty measurements as the initial step.

*E-service Quality*

To determine the dimensions of e-service quality an exploratory factor analysis (EFA) with Principle Component Factoring and Varimax Rotations was conducted. Kaiser-Meyer-Olkin measure of sampling adequacy and Bartlett test of sphericity tests were performed to test the appropriateness of data for conducting factor analysis (Sharma, 1996). Result of the tests (KMO=0.750,  $\chi^2$ Bartlett test (28)=185.164, p=0.000) were satisfactory. The diagonals of the anti-image correlation matrix were all over 0.50, supporting the inclusion of each item in the factor analysis. Factors with eigenvalues over one were retained and items with factor loadings below 0.50 and items with high cross loadings were excluded (Hair et. al., 1998). As a result of the analysis two dimensions were found. By conducting exploratory factor analysis, we found that e-service quality is measured on two dimensions; efficiency and privacy (See Table 1).

**Table 1.** Factor Analysis result of e-service quality

Factor Name	Factor Items	Factor Loading	Reliability
Privacy	It protects information about my web-shopping behavior	0.812	0.78
	It protects my credit card information	0.774	
	It makes accurate promises about delivery of products	0.748	
	It does not share my personal information with other sites	0.734	
Efficiency	This site makes it easy to find what I need	0.771	0.69
	It enables me to complete a transaction quickly	0.742	
	It makes it easy to get anywhere on the site	0.738	
	Information at this site is well organized	0.610	

*E-service recovery*

To determine the dimensions of e-service quality, an exploratory factor analysis (EFA) with Principle Component Factoring and Varimax Rotations was conducted. Kaiser-Meyer-Olkin measure of sampling adequacy and Bartlett test of sphericity tests were performed to test the appropriateness of data for conducting factor analysis (Sharma, 1996).

**Table 2.** Factor Analysis result of e-service quality

Factor Name	Factor Items	Factor Loading	Reliability
Responsiveness	It provides me with convenient options for returning items	0.739	0.728
	It tells me what to do if my transaction is not processed	0.714	
	This site offers a meaningful guarantee	0.694	
	This site handles product returns well.	0.661	
	It takes care of problems promptly.	0.652	

<b>Compensation</b>	It compensates me when what I ordered doesn't arrive on time	0.853	0.657
	This site compensates me for problems it creates	0.853	
<b>Contact</b>	This site has customer service representatives available online	0.867	0.648
	It offers the ability to speak to a live person if there is a problem	0.795	
	This site provides a telephone number to reach the company	0.627	

Result of the tests (KMO=0.750,  $\chi^2$ Bartlett test (28)=185.164,  $p=0.000$ ) were satisfactory. The diagonals of the anti-image correlation matrix were all over 0.50, supporting the inclusion of each item in the factor analysis. Factors with eigenvalues over one were retained and items with factor loadings below 0.50 and items with high cross loadings were excluded (Hair et. al., 1998). As a result of the analysis three dimensions were found. By conducting exploratory factor analysis, we found that e-service recovery is measured on three dimensions; responsiveness, compensation and contact (See Table 2).

#### *E-Loyalty*

To determine the dimensions of e-service quality, an exploratory factor analysis (EFA) with Principle Component Factoring and Varimax Rotations was conducted. Kaiser-Meyer-Olkin measure of sampling adequacy and Bartlett test of sphericity tests were performed to test the appropriateness of data for conducting factor analysis (Sharma, 1996). Result of the tests (KMO=0.729,  $\chi^2$ Bartlett test (10)=241.417,  $p=0.000$ ) were satisfactory. The diagonals of the anti-image correlation matrix were all over 0.50, supporting the inclusion of each item in the factor analysis. Factors with eigenvalues over one were retained and items with factor loadings below 0.50 and items with high cross loadings were excluded (Hair et. al., 1998). As a result of the analysis unidimension was found.

**Table 3.** Factor Analysis result of e-loyalty

<b>Factor Name</b>	<b>Factor Items</b>	<b>Factor Loading</b>	<b>Reliability</b>
<b>E-Loyalty</b>	Encourage friends and others to do business with this site?	0.780	0.767
	Recommend this site to someone who seeks your advice?	0.749	
	Say positive things about this site to other people	0.742	
	Consider this site to be your first choice for future transactions?	0.673	
	Do more business with this site in the coming months?	0.667	

#### 4.2. Multiple Regression Analyses

When we conducted multiple regression analyses to understand the relationship between e-loyalty and e-service quality and recovery, we found out that efficiency and contact explain e-loyalty at 99% confidence interval ( $F=15.657$ ,  $p=0.000$  respectively,  $R=0.469$ ;  $R^2= 0.220$ ).

**Table 4.** Multiple Regression Analysis result of E-loyalty

<b>Dependent variable: E-Loyalty</b>			
<b>Independent variables:</b>	<b>Beta</b>	<b>t-value</b>	<b>p-value</b>
Efficiency	0.352	4.346	0.000
Contact	0.255	4.157	0.000

As reflected in Table 4 efficiency and contact had almost equal contributions ( $\hat{\alpha}=0.352$  and  $\hat{\alpha}= 0.255$ ) respectively.

#### 5. CONCLUSION AND DISCUSSION

The main purpose of this research was examining effects of the dimensions of e-service quality and e-service recovery on customer e-loyalty. Thus, this study intended to understand the e-service quality and recovery of Internet companies from the consumer perspective, by identifying main factors are able to predict e-loyalty of consumers. Furthermore, the study identifies the influence of the individual dimension of e-service quality and e-recovery on service loyalty. As a result of analysis, one of the sub dimensions of service quality “efficiency” and sub dimensions of e-service recovery “contact” are the most important factor affecting “e-loyalty”. Online retailers are provided with tactical strategies on how to immunize online shoppers’ loyalty against switching behavior.

Internet companies, thus, need to know that site traffic and attracting new customers are great, but no longer enough. The result of this study might be helpful to companies embarking on this process. A greater understanding of online consumers and more efficient web site systems can build loyal customers. There are a number of limitations in the context of which the present study’s main conclusions should be viewed. These stem mainly from time and cost constraints, which did not allow the collection of a larger and more rigorously selected sample. Future researchers should aim to improve upon this effort.

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