E-CUSTOMER SATISFACTION IN THE E-TAILING INDUSTRY: AN EMPIRICAL SURVEY FOR TURKISH E-CUSTOMERS

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ABSTRACT

The main objective of this study is to provide theoretical and empirical frameworks for determining drivers of e-customer satisfaction from e-tailers and highlight what is needed to increase e-customer satisfaction level in Turkey. First, literature was reviewed about customer satisfaction to verify the drivers of e-customer satisfaction. Second, an empirical study was conducted to determine the drivers of e-customer satisfaction and measure e-customer satisfaction level from e-stores. In conclusion, the empirical survey's results of 552 respondents show that e-customer satisfaction is positively influenced from e-shopping cost, e-store design quality, e-store service quality, e-store information quality and cargo carriers' service quality. E-customers are also strongly satisfied with e-shopping cost, e-store design quality, e-store service quality and cargo carriers' service quality. On the other hand, apart from choosing cargo carriers, e-customer satisfaction is negatively influenced from e-store shipping policy, and e-customers are strongly dissatisfied from e-stores' information quality and shipping policies.

Keywords: E-customer satisfaction, e-tailing industry, e-store

1. INTRODUCTION

In the highly competitive business environment, the impact of Internet on trading, shopping, marketing, advertising, retailing and selling activities seems quite crucial. Traditional businesses have started to make their way through the Internet because it has brought fundamental changes to many industries from procurement to logistics service and had some unique advantages over other channels. In the literature, an "e" is put in front of the concepts related to electronics and the Internet. Therefore, e-commerce, e-service quality, e-retailer or e-tailer, e-customer and e-customer satisfaction are preferred instead of

electronic commerce, electronic service quality, electronic retailer, electronic customer and electronic customer satisfaction etc.

The Internet usage rate in business to business (B2B) and business to consumer (B2C) markets has been rapidly growing, and this rapid development of e-commerce has seen emerging in e-tailing industry. According to the State of Retailing Online 2007 survey conducted by Shop.org and Forrester Research, e-tail sales reached to $146.5 billion excluding travel in 2006 and are expected to rise 18 percent to $259.1 billion in 2007 in the USA ("Shop.Org/Forrester Research", 2007). In Turkey, the number of the Internet has also rocketed, and e-tailers sales have shown a tremendous increase since 2000. The number of individual and institutional subscribers amounted to 1,865,930 and 382,175 respectively in June, 2005. However, 13.93% of the population (more than 9 million users) was the Internet users and 5.59% of the Internet users benefited from purchasing/ordering goods and services over the Internet ("Turkish Statistical Institute", 2005). The Turkish e-tail industry was estimated $9 million worth in 2000 and $200 million in 2006 and predicted to reach $240 million in 2007 (Aydın, 2007) and grow not only in Turkey but also in the world.

E-tailers need to remain competitive in highly competitive e-business industry. One of the ways to remain competitive and improve competitive advantage is to attract more e-customers and increase e-customer retention. E-customer satisfaction is the path to success in achieving this. Therefore, one of the main issues in e-marketing is related to e-customer satisfaction level provided during e-shopping. No matter how critical e-customer satisfaction may be, not enough empirical studies are available to determine the key factors driving e-customer satisfaction and measure e-customer satisfaction level from e-tailers in Turkey. In this paper, (1) e-marketing, e-tailing, e-stores and e-customer satisfaction concepts are reviewed, (2) some of key determinants for e-customer satisfaction are explained, (3) hypotheses related to factors influencing e-customer satisfaction level are developed, and (4) the hypotheses are tested with survey results conducted on e-customers.

2. CONCEPTUAL FRAMEWORK
2.1. Customer Satisfaction

From both the theoretical and the empirical perspectives, customer satisfaction is the key to companies' competitiveness and can be considered the essence of success in today's highly competitive world of business (Bitner and Hubbert, 1994). Most of the managers have been placing significant attention on customer satisfaction to increase their profitability and market share (Bhote, 1996). Hovewer, customer satisfaction is the key factor for companies to retain their customers, build customer loyalty and gain more profits (Reichheld, 1996) and battle for competitive differentiation (Su, 2004).

Customer satisfaction is often defined as the customers' post-purchase comparison between pre-purchase expectation and performance received (Oliver, 1980). According to Zeithaml et al. (1990), customer satisfaction is based on the balance between customers' expectations and customers' experiences with the products and services. They also indicated when a company is able to lift a customer's experience to a level that exceeds that customer's expectations, then that customer will be satisfied. Oliver (1999) defined customer satisfaction as an evaluation of the perceived discrepancy between prior expectations and the actual performance of the products or services. Kotler (2000) defined customer satisfaction as a customer's feelings of pleasure or disappointment resulting from comparing the product's perceived performance in relation to his/her expectations. Kim et al. (2003) emphasized that customer satisfaction was a post-purchase attitude formed through a mental comparison of the product and service quality that a customer expected to receive from an exchange. The common point concluded from these definitions is the fact that, at least, companies should meet e-customers' expectation in one way or another for customer satisfaction.

2.2. E-Commerce, E-Marketing, E-Stores and E-Shopping in the E-Tailing Industry

Business and marketing activities are affected by Internet technologies and the Internet is revolutionizing commerce, marketing, retailing, shopping and advertising activities of products and services. There are several attractive attributes of Internet to not only e-customers but also companies on time and money saving, communicate, convenience, easy accessibility, selection from a wide range of alternatives, and the availability of information for making decisions and all marketing activities can be performed via the Internet efficiently. For example, companies are using the Internet technologies to reach out to their suppliers, manufacturers, logistics providers or customers and to provide a point of contact 24 hours a day, 7 days a week. Moreover, the benefits reached by companies from the use of Internet and information technology include quick response and access to information, better customer service, increased competitiveness, reduction on data and data re-entry (Lai et al., 2005). Using the Internet enables e-customers to fairly easily access information about product and service, vertical information (i.e., comparing a product across suppliers) at a low cost, to efficiently screen the offerings, and easily locate a low price for a specific product and service (Kolesar and Galbraith, 2000).

E-commerce and e-marketing are the two important terms in the new the Internet-based business environment. E-commerce can be defined as a way of conducting business by companies and customers performing electronic transactions through the Internet. E-marketing, (also known as Internet Marketing, Web Marketing, and Online Marketing etc.) can be defined as the promotion of products or services through the Internet. The Internet also affects retailing industry, and retail industry has been undergoing major changes in the

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2000s, when such concepts as e-store, e-shopping and e-tailing have been introduced in the literature. E-tailing industry has created pressure on traditional retailers since e-tailing is a new and low-cost marketing opportunity. E-tailing can be defined as selling products and services by using the Internet. E-tailer encompasses three main facilities of consumption activities, specifically, (1) a product search facility (often referred as a product evaluation or information gathering facility), (2) an on-line purchase function and (3) a product delivery capability (Kolesar and Galbraith, 2000). The competition between retailers and e-tailers are expected to intensify more and more, profit margins will become more rigid. The ability of effective management through improved e-customer satisfaction is going to determine winners in e-tailers.

E-tailers can deliver four dimensions of the marketer's mission (4P-product, price, promotion and place) extremely well in the Internet. With regard to the right products, e-stores can offer a larger spectrum of product offering than traditional retailers in categories ranging from electronics to shoes. When it comes to the right price, e-stores can be operated with low profit margin because of the lower cost and higher sales volume. As for the right promotion, e-stores have unlimited direct marketing, advertising and selling opportunities. Finally, with regard to the right place; the location of e-stores is not important in the Internet and e-customer can connect and purchase products and services from the Internet at any time and place. All these missions can be easily performed by e-tailers and e-stores via the Internet.

E-store is the Internet version of stores that set up electronic storefronts on the Internet. E-stores provide all kinds of products and render service to the e-customer at the click of a mouse button and make money by selling products directly to e-customers. Nowadays, e-store is vital to the success of e-marketing activities and has created the biggest shopping centers and marketplace ever. E-stores can be defined as a commercial web site on which e-customers can shop and make purchases (Lim and Dubinsky, 2004). They can be operated by either a pure player (a retailer that has only an e-store) or a branch player of traditional retailers. Some of the e-tailers have created separate, independent e-stores and the Internet-based companies such as Amazon.com, Hepsiburada.com, Shopping.com, Weblebi.com and etc. Most retailers and marketers have chosen to add the Internet to their existing distribution channel such as Kvk.com, Migros.com, Kangurum.com, Teknosa.com, Bimeks.com, and Mavibilgisayar.com in Turkey, Staples.com, Officemax.com and Sears.com in the USA. Most of the e-stores operating as the pure player are founded on in-store picking model, which means they do not have warehouses or inventories. Instead their logistics providers collect products directly from wholesalers or distributors, and they just repack products for delivery.

Some differences can be observed between shopping in a retail store and an e-store. Lohse and Spiller (1998) provided an overview of how the features of retail store relate to e-store. Monsuwé et al (2004) translated these store-features into those related to traditional shopping and e-shopping. Evanschitzky

et al. (2004) explained that the most obvious difference between traditional and e-shopping is the replacement of human-to-human interaction with human-to-machine interaction. For example, salesclerks affect traditional shopping process; whereas, no salesclerk is available in e-stores, and e-customers can decide what to buy without salesclerks' effects. While store layout is one of the decisive factors in traditional shopping, screen depth, browse and search functions, indices, image maps and e-store design quality are an integral part of e-shopping. Moreover, many buying functions seem personal and have no correspondence in the e-store, which should drive us to conclude that e-customer satisfaction is one of the major concepts in e-tailing industry in this Internet Age.

2.3. E-Customer Satisfaction in the E-Tailing Industry

Even though an increasing number of e-customers are turning to the Internet to make their purchases, many e-stores are going out of business. It seems quite simple to change e-tailers because of having an unsatisfactory e-service quality, high price of products and e-store design and etc. Moreover, there is no switching cost from one e-tailer to another one. If managers of e-stores hope to attract and retain e-customers, they need to know what evaluative criteria e-customers use while selecting an e-store (Lim and Dubinsky, 2004) and which factors are driving e-customer satisfaction. As explained before, customer satisfaction is recognized as a key influence in customers' future purchase intentions, customer retention and companies' profitability. Szymanski and Hise (2000) conceptualized e-customer satisfaction as the consumers' judgment of their Internet retail experience as compared to their experiences with traditional retail stores. In the light of these customer satisfaction definitions, e-customer satisfaction can be described as the total fulfillment of e-customers' expectations from e-stores and e-shopping. On the one hand, improving e-customer satisfaction has a higher chance of repurchasing products and service from the same e-store and remaining loyal e-customers in e-tailing industry. On the other hand, e-customer dissatisfaction is likely to switch from e-stores to retailers and engage in negative word of mouth advertising for e-shopping. Thus, e-customers who are not totally satisfied might not purchase a product and service from e-store if they have a choice of shopping somewhere else (Kim and Eom, 2002).

Table 1 illustrates a wide range of drivers of e-customer satisfaction from e-stores. Therefore, it can be measured in several different ways. For example, Szymanski and Hise (2000) analyzed e-customer satisfaction from the outcome of consumer perceptions of online convenience, merchandising, information quality, site design, and financial security. Reibstein (2002) detailed e-customer satisfaction as impacted by product selection, information, prices, on time delivery, shipping and handling. Devaraj et al. (2002) measured e-customer satisfaction through three frameworks - namely technology acceptance model, transaction cost analysis, and service quality. Kim and Lim (2001) studied consumer's perceived importance and satisfaction with the Internet shopping,

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Khalifa and Liu (2002) measured e-customer satisfaction by expectation and desire.

Table 1: Some of the prior studies for determing drivers of e-customer satisfaction

Authors	Drivers of e-customer satisfaction
Zeithaml et al. (2000)	Perceived convenience: access, ease of navigation, efficiency, flexibility, Perceived control: reliability, personalization, security, privacy
Szymanski and Hise (2000)	Convenience, site design, financial security, product information
Donthu (2001)	Site-related factors: easy of use, aesthetic design, processing speed, security, Vendor related factors: competitive value, clarity of ordering, corporate and brand equity, product uniqueness
Cho and Park (2001)	Product information, site design, consumer service, purchase result and delivery, purchasing process, payment methods, additional information services, delivery time and charge,
Kim and Lim (2001)	Width of information, update of information, depth of information, promptness of retrieval, speed of transmission, web design, customer service, ease of access, convenience of use, security of user's information, reliability of the site, advertising, entertain
Francis and White (2002)	E-store functionality, product attribute description, ownership conditions, delivered products, customer service, security
Loiancona et al. (2002)	Ease of use (ease of understanding, intuitive operations), usefulness(informational fit-to-task), interactivity (trust, response time), entertainment (visual appeal, innovativeness, flow emotional appeal), complementary relationship (consistent image, online completeness, better than other channels)
Madu and Madu (2002)	Updated information and site design
McKinney et al. (2002)	Information quality disconfirmation, system quality disconfirmation
Reibstein (2002)	Ease of ordering, product selection, product information, product prices, navigation, on-time delivery, product presentation, customer service, privacy policies, shipping and handling
Janda et al. (2002)	Information quality
Wolfinbarger and Gilly (2003)	website design, fulfillment/reliability, privacy/security and e-customer service
Evanschitzky et al. (2004)	shopping convenience, product offerings, product information, site design, financial security
Barutçu (2006a)	e-customer service quality, e-store design quality and e-shopping cost
Dolen et al. (2007)	perceived technology attributes (control, enjoyment, reliability, speed, ease of use) and chat group characteristics (group involvement, similarity, receptivity)

Wolfinbarger and Gilly (2003) analyzed four factors influenced e-customer satisfaction and indicated that website design, fulfillment/reliability, privacy/security and e-customer service are strongly predictive of e-customer judgments of quality and satisfaction. Evanschitzky et al., (2004) replicated Szymanski and Hise (2000) study in Germany and the replication was extended to two contexts consumer satisfaction with e-tail shopping and e-consumer satisfaction with the Internet financial services sites. Their study yielded some important managerial insights. First, e-customer satisfaction and its associated drivers are vital not only in the U.S. context but should also be the focus of the Internet firm strategies in Germany. Second, convenience and e-store design are the most critical drivers of e-satisfaction for both U.S. and German consumers. At the minimum, the Internet strategies of e-tail and financial services firms in these countries should focus on ensuring that they are providing additional value to the consumer in terms of e-shopping convenience and should provide an easily navigable and value-adding e-store design. Dolen et al., (2007) examined online commercial group chat for e-customer satisfaction. Their research's findings support the influence of perceived technology attributes (control, enjoyment, reliability, speed, and ease of use) and chat group characteristics (group involvement, similarity, and receptivity) on customer satisfaction and the moderating role of advisor communication style on these influences. Moreover, Dolen et al., (2007) indicated that satisfaction strongly mediated the influence of the perceived technology attributes and chat group characteristics on buying intentions and positive word of mouth.

In a word, taking into account all these above-mentioned drivers, we may reach the conclusion that it is of importance to determine which drivers have more considerable impact on building e-customer satisfaction in Turkey.

3. LITERATURE AND EMPIRICAL SURVEYS FOR DETERMINING AND MEASURING THE DRIVERS OF E-CUSTOMER SATISFACTION FROM THE E-TAILERS

Although, e-customer satisfaction is becoming an increasingly popular topic in the e-tailing industry, there are limited studies on determined drivers of e-customer satisfaction in Turkey. Most of the consumer satisfaction researches have focused on the product and service levels and discussed extensively traditional retailing literature has been extensively discussed. Therefore, empirical studies were conducted to determine the factors of e-customer satisfaction and their satisfaction levels. The main objectives of the empirical survey are to determine the drivers influencing e-customer satisfaction and to measure their satisfaction levels from e-tailers. First, hypotheses are developed based on literature survey. Second, the questionnaire was designed. Third, empirical survey was conducted in the Internet and shopping centers. Fourth, descriptive statistics of questionnaires are calculated in SPSS 11.5 program. Fifth, hypotheses were tested. Finally, several recommendations were given.

3.1. Hypotheses Development

As seen in Table 1, e-customer satisfaction has been conceptualized in a diversity of ways. Hypotheses are developed as the following drivers based on literature survey for Turkish e-customers;

(i) e-shopping cost; one of the most critical factors to influence e-customer satisfaction is e-shopping cost. The price of products and service, payment methods and interest-free installments are included in the e-shopping cost concepts. A stimulating managerial question is why consumers choose to shop online in Turkey. One of the most commonly cited reasons for e-shopping has been the price of products and service. E-customers have expected lower price in e-stores than retail stores. For example, the use of price as a bait to win over consumers is evident in the success of Amazon.com that heavily advertises lower prices for the same books one can find in local bookstores. Moreover, the Internet allows for efficient price search and comparison by employing the Internet tools such as recommendation agents (Haubl and Trifts, 2000). Therefore; it is claimed that;

H_{1a}: E-shopping cost positively influences e-customer satisfaction level, and
H_{1b}: E-customers are satisfied with e-shopping cost.

(ii) e-store design quality; e-store design quality influences a consumer's access to e-store (Kim and Lee, 2002). In the e-store design quality, design of product and service comparison and information, page format of e-customer comments, time to complete online order form, easy of searching product and service, screen layout, screen complexity, page composition, information retrieval methods, information display, use of color and background, assistance to the user and speed of accessing the e-store etc. are notable factors attracting e-customers. The influence of e-store design on e-service performance has been studied. For example, Cho and Park (2001) conducted an empirical survey of a sample of 435 the Internet users to examine the e-commerce user-consumer satisfaction index for e-shopping and found that the customer satisfaction was assessed by using the e-store design quality. Szymanski and Hise (2000) examined the role of e-store design in e-satisfaction assessments and found that e-store design was the driving force in consumer assessments of e-satisfaction. Therefore; it is claimed that;

H_{2a}: E-store design quality positively influences e-customer satisfaction level, and
H_{2b}: E-customers are satisfied with e-store design quality.

(iii) e-store service quality; e-store service quality heavily influences repurchasing decisions. A majority of studies view e-service quality as antecedents of e-customer satisfaction (Szymanski and Hise, 2000; Van Riel et al, 2004). Gefen (2002) defined service quality as the subjective comparison

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that customers make between the quality of the service that they want to receive
and what they actually get. Zeithaml (2002) defined e-customer service quality
as the extent to which a web site facilitates efficient and effective shopping,
purchasing and delivery. Some of the e-store services are real time e-customer
services, return and replacement process, period of filling out online orders
form, speed of response time to e-customers' queries from e-customer service
etc. Therefore; it is claimed that;

H_{3a}: *E-store service quality positively influences e-customer satisfaction level,
and*
H_{3b}: *E-customers are satisfied with e-store service quality.*

(iv) e-store information quality; relevance, completeness, accuracy, reliability
and timelines of the information given in e-store about products and service
affect e-consumer evaluation of the e-stores and their satisfaction levels. Janda
et al. (2002) recommended that information quality is a strong determinant of e-
consumer satisfaction in e-shopping. McKinney et al. (2002) measured e-
customer satisfaction by the expectation, information quality and system quality
disconfirmation. Madu and Madu (2002) implied that if the e-store is not
frequently updated, e-customers are dissatisfied with the information outdated.
Kim and Stoel (2005) indicated that customer service dimensions of ease in
searching, availability of frequently asked questions (FAQs), availability of in-
stock status information, and ease of comparison shopping were important
predictors of online purchase intent. Therefore; it is claimed that;

H_{4a}: *E-store information quality positively influences e-customer satisfaction
level, and*
H_{4b}: *E-customers are satisfied with e-store information quality.*

(v) e-store shipping policy; logistics is a driving force for profitable e-tailing. For
many e-tailers, delivery of ordered products gives rise to two major problems.
On the one hand, retailers have to fulfill logistic functions, such as picking,
packing and transportation, which are fulfilled free of charge by customers of
physical stores. On the other hand, the e-customers may not accept delivery
fees in e-shopping (Kotzab and Madlberger, 2001). Among some e-stores'
shipping policies are choosing cargo carriers, paying extra charge for shipping,
amount of shipping charge and forcing minimum order quantities or values for
free shipping. These applications affect e-customer satisfaction level from e-
stores as well. Therefore; it is claimed that;

H_{5a}: *E-store shipping policy positively influences e-customer satisfaction level,
and*
H_{5b}: *E-customers are satisfied with e-store shipping policy.*

(vi) cargo carriers' service quality; acquiring and retaining e-customers online
necessitate providing complete satisfaction from the first click on the e-store
website to delivery to the door. Cargo carriers have played a critical role in e-

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tailing industry and become the bridges among e-tailers and e-customers. The product has to be delivered whenever, wherever, and however the e-customer wants it delivered (Bhise et al. 2000). Therefore, e-stores can achieve e-customer satisfaction by developing cargo carrier's service quality, which enables quick delivery of ordered product to e-customers and their shipment policy. Therefore; it is claimed that;

H_{6a}: Cargo carriers' service quality positively influences e-customer satisfaction level, and
H_{6b}: E-customers are satisfied with cargo carriers' service quality.

In the light of all these e-customer satisfaction drivers, overall e-customer satisfaction stands out as a key element in the e-tailing industry. In order to measure overall e-customer satisfaction, it is claimed that;

H_{7}: E-customers are satisfied with e-shopping from e-tailers.

The survey questions were designed to test these hypotheses, and focused primarily on the impacts of e-shopping cost, e-store service quality, e-store design quality, e-store information quality, e-store shipping policy and cargo carriers' service quality on e-customer satisfaction.

3.2. Methodology

The purpose of this survey is to develop a framework for determining the drivers of e-customer satisfaction and measuring e-customer satisfaction level from e-tailers in Turkey. As seen in Figure 1, the effective and satisfactory levels from drivers of e-customer satisfaction are searched separately and compared with each other.

Figure 1: Research model
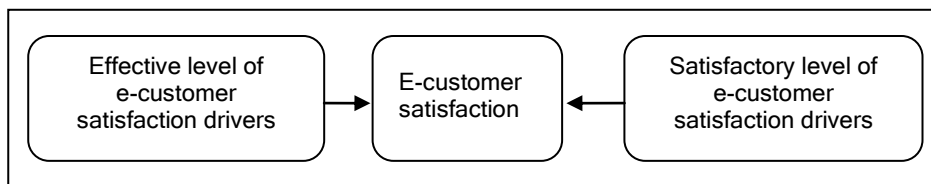
A questionnaire was developed to determine the effective level of e-customer satisfaction drivers and measure their satisfactory level. The questions were developed by taking into consideration the results of focus group discussion and literature survey. A review of the literature revealed that different scales used to measure consumer product or service satisfaction, from retail to health industries. In order to determine the effective level of drivers, 1-5 likert scales labeled "strongly ineffective" (1) and strongly effective" (5) were employed. To measure e-customer satisfaction level, the question of "how satisfied are you

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with…?" was used in each e-customer satisfaction variables. Responses for all satisfaction questions were made on 1-5 likert scales labeled "very dissatisfied" (1) and "very satisfied" (5) at each extreme (Su, 2004). The survey questionnaire consisted of sixty-three questions adapted from literature to ensure content validity and prepared in Turkish, and then translated to English. The first five questions were about the demographic characteristics of respondents, two questions related to the categories of products and service buying from the Internet and the reasons why e-customers were using the Internet. Fifty-four questions were designed to determine effective and satisfactory levels from e-stores and two questions to measure overall e-customer satisfaction level from e-shopping process. The data were collected by using both face-to-face and online survey (the Internet marketing research) methodologies. Face to face survey was conducted in four cities (İzmir, Eskişehir, Ankara and Denizli) and online survey was conducted among e-customers who bought at least one product and service from e-stores in Turkey. In the online survey, the questionnaires were sent to e-mail lists formed from previous surveys in yahoo newsgroups (@yahoogroups.com) like bilgi_kultur, horozum, bilgiyonetimi, paupazarlama, avrupada and etc. Online surveys boast many advantages over traditional methods. On the one hand, they are convenient, cheap, fast, more accurate, and can survey hard-to-reach respondents. On the other hand, unequal opportunity and self selection to participate pose some limitations in the implementation of online surveys (MeCullough 1998; David 2001; Ngai, 2003).

587 questionnaires were answered in the face to face and online surveys. 25 questionnaires were not evaluated because of some missing answers, and 552 questionnaires used for analysis. This survey's results turned out very reliable in measuring e-customer satisfaction from e-stores. This conclusion is based on a Cronbach Alpha of 0,846. Alpha value of 0,70 or higher is generally measured to an adequate pointer of reliability. Descriptive data analysis was used to analyze data collected from survey. Mean and standard deviations of questions using likert scale were calculated. One-sample T-test and multiple regression analysis were used to test the hypotheses.

3.3. Findings

552 questionnaires were analyzed with using SPSS program. As seen in Table 1, among the 552 respondents, 62,9% were males and 37,1% were females. In addition, 27,9% of the respondents were aged between 21-30; 37,5% of the respondents were aged between 31-40. In terms of the respondents' occupations, among 552 respondents, 39,3% work as officials in public institutions, 33,9% have their own business (accountants, doctors, engineers, experts and etc.). 4,2% are students, housewives and retired. In terms of the respondents' annual income, 39,1% of the respondent's annual salary is $7501-15000 and 33,5% is $5001-7500. 40,4% of the respondents have undergraduate and 35,1% of the respondents have high school degrees.

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Therefore, sample respondents are largely male, educated, middle-aged, and work in public institutions and middle class (Table 2).

Table 2: Respondents' demographics characteristics

Variable	Frequency	(%)	Variable	Frequency	(%)
Gender			**Age**		
Female	205	37,1	20 or less	65	11,8
Male	347	62,9	21-30	154	27,9
Employment			31-40	207	37,5
Official (Public)	217	39,3	41-50	119	21,6
Worker (Private)	125	22,6	51 and over	7	1,3
Self-employed	187	33,9	**Income (Annual)**		
Others	23	4,2	Up to $ 5000	95	17,2
Education			$5001-7500	185	33,5
Primary School	57	10,3	$7501-15000	216	39,1
High School	194	35,1	$15001-22500	37	6,7
Undergraduate	223	40,4	$225001 and over	19	3,4
Graduate	78	14,1			

The reasons why respondents use the Internet are ranked as following; (1) communication, (2) entertainment, (3) following news and reading newspapers, (4) gathering information, (5) e-shopping (6) academic studies, and (7) online banking respectively. Respondents bought a wide variety of products and services from the Internet. Among 552 respondents, 54,7% buy computers and computers' components, 48,4% electronics, 34% cellular phones, 29,9% reserve and buy tickets, 15,8% textile and apparel products, and 10,5% books. Therefore, e-customers mostly prefer to buy computers, computer parts, electronics, cellular phones, tickets and textile products.

According to the descriptive statistics of e-customer satisfaction variables from e-stores, e-customer satisfaction is influenced by e-shopping cost, e-store design quality, e-store service quality, e-store information quality and cargo carriers' service quality positively and e-store shipping policy negatively (Table 3). Results also revealed that a large majority of e-customers are satisfied with e-shopping. On the one hand, e-customers are satisfied with the price of products and service, paying with credit card, interest-free installment, ease of using e-store screen layout, design of product/service information and comparison, search of products, e-store format, speed of response time for their queries, e-customer service quality, accuracy of information, format of given information, delivery time, promptness, return or replacement process via cargos. In contrast, e-customers are not satisfied with paying extra charge for shipping, being forced to minimum order quantities/values for free shipping, information about order or delivery status of ordered products.

Apart from choosing cargo carriers, most of the e-customers are not satisfied with e-store shipping policy. They indicated that extra charge for shipping, being forced minimum order quantities/values for free shipping, amount of shipping

charge, information update, and information about order or delivery status were dissatisfactory (Table 3).

Table 3: Descriptive statistics for e-customer satisfaction variables

Drivers of e-customer satisfaction	Variables	Effective Level*		Satisfactory Level**	
		Mean	Std. Deviation	Mean	Std. Deviation
E-shopping cost	Prices of products and services	4,81	,568	4,00	1,001
	Credit card for payment	4,84	,518	4,03	,852
	Interest-free installment	4,86	,481	4,09	1,111
E-store design quality	Ease of use	4,74	,655	4,05	,964
	E-store screen layout	4,93	,318	4,22	1,062
	Design of product/service information	4,81	,568	3,76	,970
	Design of product/service comparison	4,87	,468	3,71	1,210
	Ease of searching product/service	4,92	,367	3,93	1,272
	Page format of e-customer comments	4,88	,440	4,14	1,062
	Speed of accessing the e-store	4,74	,659	4,03	,989
E-store service quality	Speed of response time to your queries	4,79	,588	3,97	1,024
	Process of returns and replacements	4,91	,393	3,93	1,261
	Real time e-customer services	4,90	,409	3,91	1,276
E-store information quality	Accuracy of the information	4,88	,447	4,12	1,100
	Updated information	4,96	,241	3,61	1,348
	Information about order status	4,81	,572	3,18	1,414
	Format of given information	4,91	,391	3,93	1,265
E-store shipping policy	Min. order quantities for free shipping	1,13	,437	2,65	,555
	Min. values for free shipping	1,09	,354	2,52	,710
	Paying extra charge for shipping	1,06	,291	1,37	,748
	Amount of shipping charge	1,10	,383	1,36	,677
	Choosing cargo carrier	4,95	,257	4,25	1,076
Cargo carriers' service quality	Information about delivery status	4,76	,638	3,22	1,399
	Delivery time	4,81	,572	3,99	1,036
	Delivery promptness	4,82	,556	4,00	,873
	Delivery reliability and care	4,88	,460	3,88	1,286
	Return process via cargo carriers	4,90	,439	4,07	1,138

* Scale   : (1) strongly ineffective, (5) strongly effective
** Scale : (1) very dissatisfied, (5) very satisfied

3.4. Hypotheses Testing

In hypotheses H_{1a-b}, H_{2a-b}, H_{3a-b}, H_{4a-b}, H_{5a-b}, H_{6a-b} and H_7; the influence of e-shopping cost, e-store design quality, e-store service quality, e-store information quality, e-store shipping policy and cargo carriers' service quality on e-customer satisfaction and e-customer satisfaction level from each drivers were respectively analyzed. The hypothesized relationships were tested by using one-sample T-test and regression analysis as seen in Table 4 and 5. Regression analysis identifies the relationship between overall e-customer satisfaction level and the drivers of them, and which driver is the strongest effect on e-customer satisfaction. Because e-customer satisfaction level is measured in several questions (Table 3), the average scores of the questions are calculated for hypotheses testing. In the regression analysis, overall e-customer satisfaction level from e-stores was the dependent variable, and the six factors previously identified were recorded as independent variables. The average scores of the factors representing each variable were used in the data analysis. As seen in Table 5, the R^2 value of 0,655 indicated that 65,5% of the variance in e-customer satisfaction was explained by the independent variables, with a significant F value of 172,139 (p < 0,05).

According to one sample T-test, e-shopping cost, e-store design quality, e-store service quality, e-store information quality and cargo carriers' service quality influence e-customer satisfaction positively. However, e-stores' shipping policy do not influence on e-customer satisfaction (t=-243,865 - p>0,05). Therefore H_{1a}, H_{2a}, H_{3a}, H_{4a}, H_{6a} are accepted and H_{5a} is rejected.

Table 4: One sample T-test for hypotheses testing

Drivers of e-customer satisfaction	Test Value = 3.67			
	Mean	Std. Deviation	t	Sig. (2-tailed)
H_{1a} E-shopping cost [a]	4,8370	,33180	82,632	,000
H_{2a} E-store design quality [a]	4,8411	,28875	95,290	,000
H_{3a} E-store service quality [a]	4,8816	,28978	98,239	,000
H_{4a} E-store information quality [a]	4,8881	,28228	101,388	,000
H_{5a} E-store shipping policy [a]	1,0956	,24803	-243,865	-
H_{6a} Cargo carriers' service quality [a]	4,8304	,31180	87,440	,000
H_{1b} E-shopping cost [b]	4,0405	,67372	12,919	,000
H_{3b} E-store design quality [b]	3,9790	,58867	12,321	,000
H_{3b} E-store service quality [b]	3,9372	,89569	7,009	,000
H_{4b} E-store information quality [b]	3,7101	,72875	1,294	,196
H_{5b} E-store shipping policy [b]	1,9737	,47246	-84,352	-
H_{6b} Cargo carriers' service quality [b]	3,8315	,63127	6,012	,000
H_7 Overall e-customer satisfaction [b]	4,0753	,58868	17,175	,000

[a] Scale : (1) strongly ineffective, (5) strongly effective
[b] Scale : (1) very dissatisfied, (5) very satisfied

According to regression analysis and one-sample T-tests, e-shopping cost had the strongest effect on e-customer satisfaction levels (β=0,396 - p<0,05), and e-

customers are satisfied with e-shopping cost (t=12,919 - p<0,05). Therefore, "H$_{1b}$: E-customers are satisfied with e-shopping cost" is accepted. From the e-store design perspectives, e-customers are satisfied with e-store design (t=12,321 - p<0,05) and e-store design quality had strong effect on overall customer satisfaction (β=0,130 - p<0,05). Thus, "H$_{2b}$: E-customers are satisfied with e-store design quality" is accepted. E-customers are also satisfied with e-store services quality (t=7,009 - p<0,05), and e-store service quality had the strong effect on overall e-customer satisfaction (β=0,081 - p<0,05). Therefore, "H$_{3b}$: E-customers are satisfied with e-store service quality" is accepted. However, e-customers are not satisfied with e-store information (t=1,294 - p>0,05) and e-store information quality did not have a strong effect on overall customer satisfaction (β=0,045 - p>0,05). For that reason, "H$_{4b}$: E-customers are satisfied with e-store information quality" is not accepted. Moreover, apart from choosing cargo carriers, e-customers are not satisfied with e-store shipping policy (t=-84,342 - p>0,05) and e-store shipping policy had negative effect on overall satisfaction level (β=-0,011 - p>0,05). Thus, "H$_{5b}$: E-customers are satisfied with e-store shipping policy" is not accepted. E-customers are satisfied with cargo carriers service quality (t=6,012 - p<0,05) which had the strong effect on overall customer satisfaction (β=2,30 - p<0,05). Hence, "H$_{6b}$: E-customers are satisfied with cargo carriers' service quality" is accepted. Overall e-customer satisfaction is also measured. According to one-sample T-test, e-customers are satisfied with e-shopping from e-tailers (t=17,175 - p<0,05) and "H$_{7}$: E-customers are satisfied with e-shopping from e-tailers" is accepted. Consequently, e-customers' expectations from e-stores and e-shopping are met, and e-tailers are meeting e-customer needs.

Table 5: Regression analysis for relationship between the drivers of e-customer satisfaction and overall e-customer satisfaction level

| Independent Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Constant	,732	,124		5,902	,000
E-shopping cost	,396	,035	,453	11,398	,000
E-store design quality	,130	,041	,130	3,133	,002
E-store service quality	,081	,038	,100	2,097	,036
E-store information quality	,045	,033	,036	1,387	,166
E-store shipping policy	-,011	,022	-,016	-,480	,631
Cargo carriers' service quality	,230	,048	,247	4,827	,000

(R=,809 ; R^2=,655 ; F=172,139)

The results shown in Table 5 indicate that apart from e-store shipping policy and e-store information quality, all drivers of e-customer satisfaction are significant. To sum up, E-shopping cost, e-store design quality, e-store and cargo carriers' service quality had the strongest effect on e-customer satisfaction levels respectively, and e-customers are satisfied with them.

3.5. Managerial Implications

This survey investigates the drivers that possibly influence the e-customer satisfaction of e-stores among e-customers by using 552 questionnaires. As seen in Figure 2, e-customer satisfaction is positively and strongly influenced by e-shopping cost, e-store design, e-store service, e-store information, and cargo carriers' service quality. In other words, e-customer satisfaction level is not influenced by e-stores' shipping policy. On the other hand, e-customers are satisfied with e-shopping cost, e-store design, e-store service and cargo carriers' service quality and not satisfied with e-store information quality and e-store shipping policy. To receive better e-customer satisfaction from e-shopping, e-tailers should continue to minimize e-shopping cost. E-customers are price conscious. According to the results of regression analysis, e-customer satisfaction level is strongly influenced by e-store lower prices, payment methods, and shipping charges. E-tailers should enhance e-store design, e-customer service and cargo carriers' service quality, even though e-customers are satisfied with them. Moreover, e-tailers must change their shipping policies except for choosing cargo carriers. They should add shipping charges on the prices of products instead of extra shipping charges, and should not impose minimum order quantities or values for free shipping.

Figure 2. Testing research model
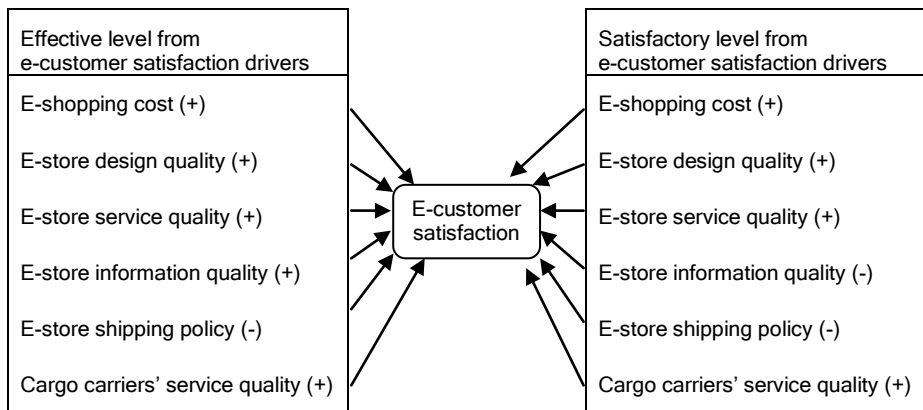
The survey results also imply that e-tailers may need to put emphasis on specifying more satisfactory information. E-tailers should provide more update, accurate and useful information about products and services. Besides, e-tailers need to offer value-added services in order to differentiate themselves from their competitors. For example, they should use new technology to search and compare prices of products in different e-stores on the Internet and select and compare products with each other easily by using expert systems (Barutçu, 2006b). These improvements and applications will also increase competitiveness of e-tailers over traditional retailers.

4. CONCLUSION

Although, e-shopping in Turkey is very early stages of development compared with the USA and developed countries, there has been significant growth in e-tail industry over the last five years in Turkey. E-stores sales are predicted to reach $240 million in 2007 (Aydın, 2007) and expected to increase in Turkey.
From what has been discussed above, one may safely draw the conclusion that the management of e-stores or e-tailers is not limited to market and sell products, but rather they are expected to manage all activities ranging from procurement to delivery in their e-tailing supply chain and increase e-customer satisfaction from their e-services.

E-tailers should have a better understanding of the Internet marketing strategy and also have an interest in promoting high-quality, effective, and safe e-shopping and high e-customer satisfaction. E-customer satisfaction is the essential ingredient for successful long term the Internet marketing and selling because totally satisfied e-customers can purchase products and service repeatedly not only from the Internet but also from the same e-stores and e-tailers. There is no denying the fact that a good many drivers exist in the literature, pointing at e-customer satisfaction with e-stores. Some earlier studies measured it based on the service quality, design quality, convenience, reliability, security, privacy and so on. For example, Szymanski and Hise (2000) analyzed e-customer satisfaction from the outcome of consumer perceptions of online convenience, merchandising, site design, and financial security, whereas Kim and Lim (2001) studied consumer's perceived importance and satisfaction with e-shopping. Khalifa and Liu (2002) measured e-customer satisfaction by expectation and desire, while Barutçu (2006a) analyzed e-customer service quality, e-store design quality and e-shopping cost for e-customer satisfaction.

In this study, e-customer satisfaction is analyzed and tested by six drivers of e-customer satisfaction; e-shopping cost, e-store design, e-customer service, information quality, shipping policy and cargo carriers service quality. According to survey results, apart from excisiting e-store shipping policy, all drivers influence e-customer satisfaction positively. Moreover, e-customer satisfaction levels are measured. E-customers are satisfied with e-shopping cost, e-store design, e-customer service and cargo carriers. In other words, e-customers are not satisfied with shipping policy and information quality of e-tailers. Therefore, e-tailer should overcome these problems and enhance the other drivers so as to boost e-customer satisfaction. Further researches could be conducted with different drivers of e-customer satisfaction to determine their satisfaction levels in larger samples and different countries and to analyze similarities and differences.

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