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The role of e-service quality dimensions on customer behavioral intentions in e-retailing

E-perakendecilikte e-hizmet kalitesi boyutlarının tüketicilerin davranışsal eğilimleri üzerine etkisi

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Abstract

The aim of this study is to explore whether the e-service quality dimensions (efficiency, system availability, information quality, fulfillment, and privacy) and company reputation would affect customers' behavioral intentions such as customers' purchase intention, loyalty, or positive word-of-mouth (WOM) via creating satisfaction and trust within Turkish e-retailing sector.

Descriptive statistics and factor analysis in SPSS 21, and Structural Equation Modeling (SEM) in Mplus 6.1 was performed in the research model. A total of 589 usable questionnaires were collected in Turkey, using convenience sampling.

The findings suggest that e-service quality dimensions have significant positive impacts on Turkish customers' purchase intention and loyalty by improving customer satisfaction and trust.

Keywords: E-Service Quality, Reputation, Satisfaction, Trust, Purchase Intention, Loyalty, Positive WOM

Özet

Bu araştırmanın amacı, ülkemizdeki e-parekendecilik hizmet sitelerinin etkinlik, sisteme erişebilirlik, bilgi kalitesi, gerçekleştirme ve kişisel bilgilere verilen önem-gizlilik gibi kalite boyutlarının, e-parekendecilik hizmeti alan müşterilerin güveni kazanılarak ve müşteri tatmini yaratılarak müşterilerde satın alma isteği, sadakat ve ağızdan ağıza olumlu iletişim gibi davranışsal eğilimleri nasıl etkilediğini göstermektir. Ayrıca firma itibarının bu alışveriş sırasında müşteriler üzerinde güven ve tatmini arttırma konusu da incelenmiştir.

Bu araştırmada tanımlanan değişkenler arasındaki tüm ilişkiler Yapısal Eşitlik Modeli (YEM) kullanılarak incelenmiştir. Bu amaçla SPSS 21 ve MPlus6 paket programları kullanılmıştır. Oluşturulan anket formu internet üzerinden alışveriş yapan 596 kişiye kolayda örnekleme yöntemi ile anlık olarak uygulanmıştır.

Araştırma sonucunda ülkemizdeki e-hizmet kalite boyutlarının, müşteri güveni ve tatmini arttırıldığında, müşterinin satın alma isteği ve sadakat üzerinde olumlu etkileri olduğu belirlenmiştir.

Anahtar Kelimeler: E-Hizmet Kalitesi, İtibar, Tatmin, Güven, Satın Alma İsteği, Sadakat, Ağızdan Ağıza Olumlu İletişim

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1. Introduction

Since two-three decades, e-commerce has been affecting every aspect of the economy like retailing, where the consumers are participating more in all processes of any product or service. In Turkey, the percentage of individuals using e-commerce for private purposes was 36.5 percent in twelve months (April 2019-March 2020) and this proportion increased 2.4 percent compared to the previous year according to [1]'s survey.

Turkey is one of the active markets in e-commerce. Although the volume of e-commerce in Turkey has reached 14.6 billion USD and the volume of e-retailing to 7.9 billion USD in 2019, e-commerce in Turkey still represents a small percentage, 6.2 percent of all its retail business as reported by Tubisad, the Turkish informatics industry association for 2019 [2]. Turkish economy is in a period of relatively slow growth, while the e-commerce volume showed a radical increase from the point of retail spending. However, e-commerce in Turkey is still developing but not at the desired level.

With an experience gained from the customers, companies can develop specific e-retailing strategies and tactics to increase online sales and to integrate e-commerce environment with traditional store-based retailing. When compared to traditional shopping, the savings on time and distance are significant advantages of e-retailing [3]. In general, websites are providing the first interaction between the e-retailer and its customers, and can be seen as the face of companies [4]. So, e-retailers have to concentrate on their customer interaction over the websites if they want their customers to repeat purchases by sustaining long-term relationships and to share their positive experiences with the others. The scholars from both Information Systems and Marketing have analyzed the customer demands from their online interactions [5] and the importance of service quality have already been emphasized under the e-retailing context. Some authors ([6], [7]) have underlined that the success of e-service quality dimensions are interrelated with the customer behavioral intentions. Among several antecedents of customer behavioral intentions, satisfaction is thought to be the primary feature within the customer evaluations of e-service that consequence quality vision [8]. Theoretical research has also proved that satisfaction causes customer loyalty ([9], [10]), enhances positive WOM ([7], [11]), and leads to repeat purchases ([12], [13]).

Besides satisfaction, trust have also been demonstrated as one of the important variables describing the success of e-commerce in the previous studies, because consumers doubt to make purchases unless they trust the retailer ([14], [15]). Furthermore trust has been found to effect customer behaviors such as purchase intention and WOM via loyalty ([10], [11]). In the competitive environment of e-retailing, trust has significant impact not only in attracting new customers, but also persuading them to realize successive purchases [16]. In addition, a good reputation is an advantageous strength for e-retailers when the customers need to be sure that an e-retailer will deliver the goods as contracted [17].

As a result, this study contributes to the literature in several ways. First, the purpose of present study is to find the variations in the current literature of customer satisfaction, trust, and behavioral intentions together with company reputation based on e-service quality. Second, the current study further supports the need for considering the effects of cognitive dimensions in modelling the antecedents of customers' behavioral intentions such as purchase intention, loyalty, and positive WOM within the e-retailing context. Moreover, this study aims to understand Turkish consumers' perception on e-retailing under these constructs in order to address the reasons of those low ratios within the Turkish e-commerce sector.

Therefore, this study examines the direct and indirect impacts of all relations between the modelled constructs in an integrated framework, and the following questions were derived with regard to these contributions:

1. What are the Turkish e-customers' perceptions of e-service quality?
2. How do e-service quality dimensions affect Turkish customers' satisfaction, trust, and behavioral intentions together?
3. What is the role of company reputation on Turkish customers' satisfaction, trust, and behavioral intentions within e-service context?

The next section presents a theoretical framework and research hypothesis of the study. The research methodology and the details of analysis are described in the third section. The final section consists of the findings discussion and the conclusion.

2. Theoretical framework, proposed model and research hypothesis

In this study, a casual research design was adopted and evaluated as a proposed model in an integrated framework to explore that the customer behavioral intentions are effected from e-service quality dimensions over the customer satisfaction and trust in connection with the role of company reputation, as shown in Figure 1.

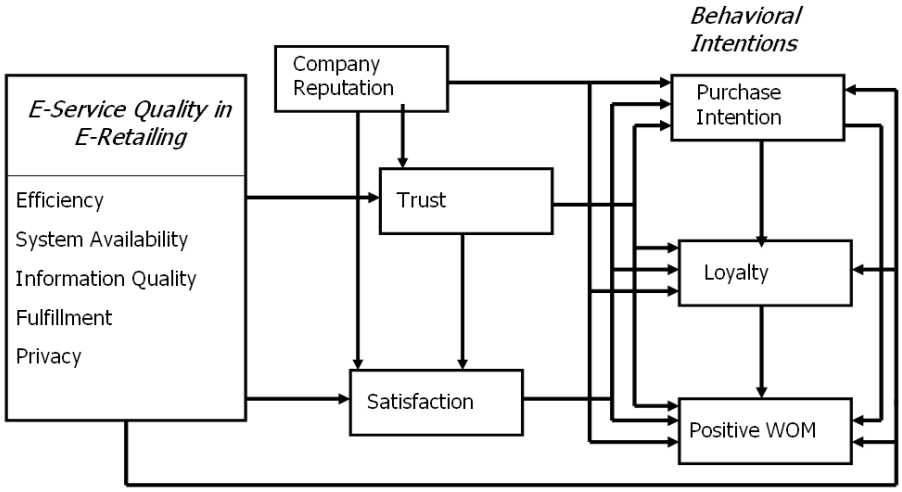

Figure 1. Proposed model.

The six independent variables of the proposed model are e-service quality dimensions (efficiency, system availability, information quality, fulfillment, and privacy) and the company reputation. The five dependent variables are the customers' behavioral intentions (customers' purchase intention, loyalty, or positive WOM), satisfaction, and trust.

2.1. E-service quality and e-service quality dimensions

E-service can be simply defined as "*providing service to users electronically*" [5]. More elaborately, e-service is defined as "*deeds, efforts or performances whose delivery is mediated by information technology. E-service includes the service element of e-tailing, customer support, and service delivery*" [18]. E-service is one of the key determinants in identifying the success of e-commerce, and becoming progressively important. Especially the interactive flow of information is not only providing a valuable experience to customers [19], but also giving chance to e-retailers for measuring the performance of them. Consequently, the competitive benefits of e-commerce can be enhanced by e-service quality which leads an increase in desirability, hit rate, usage, customer permanence, and positive WOM. The expectation of online customers is higher than traditional channels' customers from the point of service quality. An uncomplicated and attractive website design, a user-friendly interface, aesthetic visuals and an appealing purchase process can be used to create an "e-atmosphere" for customers in e-retailing practices [3].

[18] defined e-service quality "*as the overall consumer evaluations and opinions about the excellence of received e-service in the virtual market place*". Defining and measuring e-service quality has a long history. Several authors ([6], [5], [20]) have developed scales to measure the performance of e-service quality dimensions. [21] defined one of the most famous scales called E-S-QUAL for e-service quality containing efficiency, system availability, fulfillment, and privacy dimensions in 2005.

However, it is not easy to measure e-service quality. Scholars have hypothesized different e-service quality dimensions in the literature, such as "*efficiency/website design*" ([22], [23], [3]), "*system availability*" ([21], [12]), "*information quality*" ([24], [20], [4]), "*fulfillment*" ([21], [10], [18]), "*privacy*" ([25], [26]), "security" ([27], [5]), "*innovativeness*" ([24], [28]), "*perceived risk*" ([15], [14]), "*perceived usefulness*" ([29], [28]), "*ease of use*" ([29], [28], [14]), "*responsiveness*" [30], etc. Yet, a well-defined conceptual description or model is not available.

In this study, we concentrated on efficiency, system availability, fulfillment, privacy, and information quality dimensions of e-service quality, which are commonly used in the literature.

Efficiency: [6] defined efficiency as "*the ability of the customer to get to the website, find their desired product and information associated with it, and check out with minimal effort*". This means, website designers can ensure high site traffic and attract the attention of consumers to the website by creating the best combination in terms of website content and visualization [3]. A well-developed and easy-to-use website allows virtual interactions between the e-retailer and customer leading to "flow opportunities" where the customer's preferences can be changed [23]. More recently, [31] approved that satisfaction has been influenced significantly from the delivery performance and website design.

System Availability: [21] defined system availability as "*the correct technical functioning of the site that refers to the speed of access and availability of the website at all times*". [12] found that the speed of access had a powerful efficacy on satisfaction. According to [21], the system availability is one of the factors that effects the customer's opinion on overall quality and loyalty tendency.

Information Quality: [12] defined it as "*the quality of information which is basically evaluated in terms of the information content, accuracy, format, and timeliness within the end-user computing context*". Not only the currency of information presented on a website, but also full disclosure of policies, procedures, and any charges that may occur during the ordering

process are important aspects [20]. According to [32]'s study, information quality is found as the most important dimension in 71.42% of the questionnaires within 24 different dimensions and reported as crucial for satisfaction.

Fulfillment: [5] defined fulfillment / reliability as *"(a) the accurate display and description of a product so that what customers receive is what they thought they ordered, and (b) delivery of the right product within the time frame promised*". [10] have claimed that order procurement and fulfilment improve satisfaction in e-retailing [11] and also [33] found that user satisfaction will be impressed by on-time and trustworthy delivery so that they will prefer the e-retailer again which will increase their visit frequency. Fulfillment / reliability represents the ability of the website to fulfill orders correctly, deliver promptly, and keep personal information secure ([21], [33], [18]).

Privacy: Privacy defined as "*the degree to which the customer believes the site is safe from intrusion and personal information is protected in terms of collection, storage, processing, distribution, and usage*" [21]. Thus, the construct of privacy refers to companies not sharing information with third parties unless the customer gives permission [34]. In addition, the customers can access the information that is collected about them in that site, and control over that information [26]. Privacy is the main concern for all online activities when considered the Internet without borders or without regulated restrictions. These concerns can be solved by applying privacy policies or statements on the websites about the data collection, usage, and distribution of personal information [35].

As a result, developing a clear Privacy Policy is becoming really important in building trust and improving relationships. [35] found that "a successful relationship between buyer and seller depends on the level of the buyer's trust which is shown in their Privacy–Trust–Behavioral Intention model that explains how privacy influences trust and then trust influences consumer behavioral intention for online transactions".

2.2. Company reputation

[36] viewed company reputation "*as the accumulated impressions that stakeholders form about a company, resulting from interactions with the company itself and the communication received about it*". According to [37], instead of legally binding structures, reputation as a key antecedent of a company's reliability may be more effective to improve the trust of customers and simplify the processes. It reduces the doubts by signaling positive attributes of the companies, such as product quality [38]. The customers' prior experience and perceived reputation of the company are more important when engaging in e-retailing than traditional channels [17].

The constructs defined above are the independent variables of this research and the hypotheses related to them are given under the dependent constructs given below.

2.3. Satisfaction

Satisfaction can be defined as "*accumulation of satisfaction acquired by the consumers on every purchase, and experience to consume goods or services time after time on an online site*" [39]. Satisfaction within the e-commerce case is defined as "*the contentment of the consumer with deference to the previous purchase experiences with an e-retailer*". The customer satisfaction has been effected significantly from e-service quality as underlined by [24], [8] and [31].

Thus, the marketing literature confirms that customer satisfaction is one of the main drivers of repurchase [40]. Customer satisfaction has a significant effect on purchase intention and customer retention, resulting in an increase in customer loyalty, as well as positive WOM, a better reputation and financial increments [41]. Depending on most of the studies, customer satisfaction can be accepted an antecedent of customer loyalty because of its significant and positive impact [42]. Furthermore, the following hypothesis is proposed.

H_1: E-service quality dimensions (a. efficiency, b. system availability, c. information quality d. fulfillment, e. privacy) have positive direct impacts on customer satisfaction.

H_2: Company reputation has a positive direct impact on customer satisfaction.

H_3: Customer satisfaction has positive direct impacts on customers' behavioral intentions (a. purchase intention, b. loyalty and c. positive WOM).

2.4. Trust

[9] defined trust "*as being a belief in the e-retailer's ability (including e-retailer dependability, competence, integrity and benevolence) to fulfill its obligations in a commercial relationship with its customers*". Thus, depending on this definition, "online trust would result from an e-retailer's privacy policy, security efforts, website effectiveness, expected product performance, and 'after sale' support" [16]. According to [14], customer attitudes are positively impacted from trust in an e-retailer as a prominent behavioral belief that, has also an influence on behavioral intentions. In this sense, trust serves as a driving force for buyers' positive attitudes toward shopping online [43]. Trust is also considered tightly coupled with reputation. In addition, [44] found that satisfaction and trust effected from the e-service quality have an influence also on customer loyalty in a positive manner. Consequently, the following hypotheses are proposed.

H_4: E-service quality dimensions (a. efficiency, b. system availability, c. information quality d. fulfillment, e. privacy) have positive direct impacts on customer trust.

H_5: Company reputation has a positive direct impact on customer trust.

H_6: Customer trust has positive direct impacts on customers' satisfaction (a) and behavioral intentions (b. purchase intention, c. loyalty and d. positive WOM).

2.5. Behavioral intentions

Nowadays, e-commerce is one of the most popular marketing channels. Thus, e-commerce is an enthusiastic area for academics and practitioners from the perspective of customer evaluations and they argue that customers show positive behavioral intentions when they are satisfied with the e-service experience. On the other hand, customer experiences which effect the behavioral outcomes are ultimately important to increase the company profitability. According to a model presented by [6], behavioral intentions can be fulfilled by purchase intention, WOM, loyalty, complaining behavior, and price sensitivity; and they are influential to a customer's decision whether remain with or leave a company [8]. Especially, online WOM, whether is negative or positive, has a stronger impact on customers [13]. When a customer has a positive experience with an e-retailer, not only would translate into his/her repurchase intention but also would spread the news to their friends and relatives through WOM [11]. Several authors (e.g. [13], [42]) have studied behavioral intention as a designator of e-commerce success. In this study, purchase intention, loyalty, and positive WOM were examined as behavioral intentions of customers.

Purchase intention: Purchase intention can be defined as "*intention to repurchase a product twice or more either the same or different product*" [45]. As mentioned in the previous studies, purchasing intention has been positively affected from the customer intuitions of service quality and satisfaction. For instance, [30] in their study, identified e-service quality dimensions that affect overall service quality and customer satisfaction, which in turn are significantly related to customer purchase intentions. Based on the above, the following hypotheses are proposed.

H_7: E-service quality dimensions (a. efficiency, b. system availability, c. information quality d. fulfillment, e. privacy) have positive direct impacts on customer purchase intention.

H_8: Company reputation has a positive direct impact on customer purchase intention.

H_9: Customer purchase intention has positive direct impacts on customer loyalty (a) and on customer positive WOM (b).

Loyalty: [46] defined loyalty as "*a deeply held commitment to consistently re-buy or re-patronize a preferred product in the future despite situational influences*". As a key component in the consumer marketing literature, loyalty has a significant effect for a company's sustainability [47]. "Loyal customers allow companies to increase sales volumes, reduce communication costs in order to attract new customers and create brand capital" [41]. Furthermore, loyalty is generally attributed to satisfaction and can be improved by overall satisfaction not only in online but also in traditional context. On the other hand, positive WOM is an anticipated result as one of the behavioral outcomes of loyalty. Thereupon, the following hypotheses are proposed.

H_{10}: E-service quality dimensions (a. efficiency, b. system availability, c. information quality d. fulfillment, e. privacy) have positive direct impacts on customer loyalty.

H_{11}: Company reputation has a positive direct impact on customer loyalty.

H_{12}: Customer loyalty has a positive direct impact on customer positive WOM.

Positive word of mouth (WOM): Positive WOM is defined as "*informal communications between existing and potential customers regarding evaluations of goods or services; because personal communication is viewed as a more reliable source than non-personal one, WOM is a powerful force in influencing future purchase decisions*" [46]. [48] found that satisfaction has a positive influence on customers' WOM communication. Satisfied customers advise the product or service to the others when they own robust repurchase intentions. WOM does seem to be one of the most popular dependent variables that measures the loyalty of a customer [10]. In a study by [49], loyalty, satisfaction, and trust are accepted as an antecedent of WOM. Thereupon, the following hypotheses are proposed.

H_{13}: E-service quality dimensions (a. efficiency, b. system availability, c. information quality d. fulfillment, e. privacy) have positive direct impacts on customer positive WOM.

H_{14}: Company reputation has a positive direct impact on customer positive WOM.

3. Research methodology

Together with the literature review and with the aim of defining the concepts more precisely, the research objective was settled to empirically examine and investigate variations in customers' behavioral intentions such as customers' purchase

intention, loyalty, or positive WOM that could be related to defined e-service quality dimensions and company reputation via creating satisfaction and trust. A holistic (multivariate) approach was used in this research to give a more pragmatic picture. Direct and indirect effects of those variables among each other were examined in an integrated framework where the research hypotheses about indirect relations were outlined in Appendix 1.

Descriptive statistics and factor analysis in SPSS 21, and Structural Equation Modeling (SEM) in Mplus 6.1 was performed in order to test all the relationships among variables in the proposed model. Some potential problems such as low reliability and misspecification can be avoided by using SEM.

3.1. Data and data collection

A survey-based quantitative approach was used to investigate the results of the proposed model that was pilot-tested using a convenient sample of 71 respondents, after which necessary changes were made in accordance with the preliminary analysis based on the pilot data. A new version of the survey questionnaire containing the 57 statements were distributed to personnel of the selected small/medium/large size private/government corporations from different sectors such as transportation, automotive, banking, education, etc. Who agreed to participate. The questionnaire was applied only to e-commerce customers. A total of 589 responses were received via either face-to-face survey or in an e-mail environment. In general, data was gathered from all walks of life (from every socio-economic class).

Table 1 lists the final version of the questionnaire which is prepared by using the measures from the appropriate previous studies, making minor wording changes to adapt these measures into the e-retailing case. All items were scored on a 5-point Likert scale, ranging from “strongly disagree” to “strongly agree”.

Table 1. Items in the measurement model

EFF	*EFFICIENCY* [21], [22]
EFF1✓	This e-retailer’s website makes it easy to find what I need.
EFF2✓	It makes it easy to get anywhere on this e-retailer’s website.
EFF3✓	This e-retailer’s website loads its pages fast.
EFF4✓	It enables me to complete a transaction quickly.
EFF5✓	Information at this e-retailer’s website is well organized.
EFF6	Information on this e-retailer’s website is regularly updated.
SYS	*SYSTEM AVAILABILITY* [21]
SYS1✓	This website is always available for business.
SYS2✓	This website launches and runs right away.
SYS3✓	This website does not crash.
SYS4✓	Pages at this website do not freeze after I enter order information.
INQ	*INFORMATION QUALITY* [15], [22]
INQ1✓	This e-retailer’s website provides correct information about the item that I want to purchase.
INQ2✓	This e-retailer’s website provides sufficient information when I try to make a transaction.
INQ3✓	Overall, the information this e-retailer’s website provides is of high quality.
INQ4✓	Clear information on how to make the purchase on this e-retailer’s website.
FUL	*FULFILLMENT* [21], [5], [20]
FUL1✓	This e-retailer delivers orders when promised.
FUL2✓	This e-retailer quickly delivers what I order.
FUL3✓	I get what I ordered from this e-retailer’s website.
FUL4	This e-retailer has in stock the items that it claims to have.
FUL5	This e-retailer makes accurate promises about delivery of products.
FUL6	This e-retailer gives the customer numerous payment options.
PRI	*PRIVACY* [25], [16], [20], [27]
PRI1✓	This e-retailer is obligated to protect privacy.
PRI2✓	This e-retailer should not reveal personal information to a third party.
PRI3✓	This e-retailer should reveal privacy policy.
PRI4✓	This e-retailer’s website has the advanced technology to protect my personal information.
PRI5✓	This e-retailer implements security measures to protect its online shoppers.
PRI6✓	Symbols and messages that signal the website is secure are present on this e-retailer’s website.
PRI7✓	This e-retailer assures me that I will not be placed on mass-mailing lists.
SAT	*SATISFACTION* [20], [27], [40]
SAT1✓	In general, I was pleased with the quality of the service this e-retailer provided.
SAT2✓	I think I did the right thing when I decided to use this e-retailer for making my purchase.
SAT3✓	My overall evaluation of services provided by this e-retailer is good.
SAT4✓	I am satisfied with the pre-purchase experience of this website (e.g., consumer education, product search, quality of information about products, product comparison).

SAT5✓	I am satisfied with the purchase experience of this website (e.g., ordering, payment procedure)
SAT6✓	I am satisfied with the post-purchase experience of this website (e.g., customer support and after sale support, handling of returns/refunds, delivery care).
TRU	*TRUST* [23], [14], [25]
TRU1	I feel safe in my transactions with this e-retailer's website.
TRU2	I trust this e-retailer's website to keep my information safe.
TRU3	Overall, this e-retailer's website is trustworthy.
TRU4	I feel that any information communicated by this e-retailer's website is secure.
TRU5✓	This e-retailer gives the impression that it keeps promises and commitments.
TRU6✓	Even if not monitored, I would trust this e-retailer's website to do the job right.
REP	*COMPANY REPUTATION* [15]
REP1✓	This e-retailer's website is well known.
REP2✓	This e-retailer's website has a good reputation.
REP3✓	This e-retailer has a reputation for being honest.
REP4✓	I am familiar with the name of this e-retailer.
INT	*PURCHASE INTENTION* [50], [9]
INT1✓	If this e-retailer has the product I need to buy, I intend to buy it from this e-retailer
INT2✓	I would consider purchasing from this e-retailer's website in the future.
INT3	It is very significant to me that I buy from this e-retailer for online shopping.
INT4	Considering this e-retailer is an important part of my online shopping.
LOY	*LOYALTY* [7], [9]
LOY1✓	I seldom consider switching to another website.
LOY2✓	As long as the present service continues, I doubt that I would switch websites.
LOY3✓	I try to use this e-retailer's website whenever I need to make a purchase.
LOY4✓	When I need to make a purchase, this e-retailer's website is my first choice.
LOY5✓	To me this e-retailer's website is the best e-retail website to do business with.
LOY6✓	I am very motivated to buy from this e-retailer when shopping online.
WOM	*POSITIVE WOM* [7]
WOM1	I say positive things about this e-retailer's website to other people.
WOM2	I recommend this e-retailer's website to anyone who seeks my advice.
WOM3✓*	I do not encourage friends to do business with this e-retailer's website.
WOM4✓*	I hesitate to refer my acquaintances to this e-retailer's website.

✓Items included into the analysis as a result of EFA.
* Because of the negative meaning in the WOM3 and WOM4, the replies given to these questions are converted in a reverse manner.

3.2. Data analysis

Table 2 presents the key demographic characteristics of the respondents from the data collected for this study. 589 respondents (357 female, 232 male) participated in the study. Generally, they were in the middle ages: 71.1% were between 30-49 years, 82.7% had a graduate degree or more. The participants were experienced Web users: 98.1% claimed to use the Web more than 3 years.

Table 2. Demographic profile of the respondents

Demographic Profile		Frequency	%	Demographic Profile		Frequency	%
Gender	Female	357	60,5	*Marital Status*	Single	163	27,6
	Male	232	39,5		Married	426	72,4
Age in Years	Under 17	2	0,3	*Internet Usage Experience*	Under 3 years	11	1,9
	18-29	89	15,1		3-5 years	32	5,4
	30-39	211	35,7		6-8 years	101	17,2
	40-49	209	35,4		8 years or more	445	75,5
	50-59	72	12,2	*E-Retailing Experience*	Under 3 years	111	18,9
	60 or more	7	1,2		3-5 years	229	38,9
Monthly Household Income	Less than 1000 TL	10	1,7		6-8 years	154	26,0
	1001-2500 TL	61	10,4		8 years or more	95	16,2
	2501-4000 TL	105	17,9	*Length of Daily Internet Usage*	Less than 2 hours	88	15,0
	4001-5500 TL	61	10,4		2-3 hours	256	43,2
	5501-7000 TL	105	17,9		4-5 hours	121	20,6
	7001TL or more	245	41,5		6-7 hours	72	12,2

Education	Less than high school	7	1,2	*Frequency of E-Retailing*	7 hours or more	53	9,0
	High school	55	9,4		Daily	2	0,3
	Vocational school (2 years)	40	6,8		Once/twice a week	29	4,9
	Bachelor's degree	323	54,8		Once/twice a month	286	48,5
	Master's degree or more	164	27,9		Once/twice a year	272	46,3
Occupation	Public Sector	84	14,3	*Ratio of E-Retailing Amount to Total Amount*	Less than %6	263	44,6
	Self-Employment	57	9,7		%6 -15	164	27,9
	Student	31	5,3		%16 -30	103	17,5
	Private Sector	308	52,2		%31 - 45	43	7,3
	House Wife	44	7,5		%46 - 60	11	1,9
	Retiree	39	6,6		%61 or more	5	0,9
	Other	26	4,4				

3.3. Factor analysis

At first, a statistically significant Bartlett's test of sphericity BTS (p= 0.000 < 0.05) = 21717.447 indicated that adequate correlations exist in between the items to continue. Further, the sampling adequacy in the current study was evaluated using the Kaiser-Meyer-Olkin method and found to be 0.959 which can be interpreted as adequate at 0.80 or above [51: 104-105].

Therefore, an exploratory factor analysis (EFA) was performed using the factor structure of the study, based on the principal components method with Varimax rotation and Kaiser normalization to assess the measuring validity. [52] proposed that Kaiser's eigenvalue > 1 rule wastes too much information and suggested a cutoff point of 0.7 to be used for determining the number of important components obtained from correlation matrices on the basis of simulation studies. Therefore, all factors retained in the analysis, also depending on [51]'s Rule-of-Thumb 3 defined as "*a predetermined number of factors based on research objectives and / or prior research*".

In terms of reliability, the Cronbachs' alpha statistics reported in Table 3, are between 0.844 and 0.926, which can be interpreted as adequate at 0.70 or above for powerful internal consistency [53]. Factor validity was ensured with the calculated total variance of 76.28% for the 11-factor scale consisting of 45 items as shown in Table 1, "much higher than the accepted level of 60% for the social sciences" [51: 109], where the details are given in Table 3. As a result of EFA, twelve items were excluded from the analysis.

Table 3. Factor loadings and descriptive statistics for the items, and internal consistency reliability (Cronbach's alpha) coefficients for the factors

Factors, Items	Factor Loadings	Eigen Values	After Varimax Expl. %	Skewness	Kurtosis	Cronbach's Alpha
Efficiency		2,379	9,273			0,861
EFF1	0,659			-0,91	0,919	
EFF2	0,725			-1,14	1,671	
EFF3	0,725			-0,58	0,102	
EFF4	0,729			-0,65	0,289	
EFF5	0,604			-0,72	0,849	
System Availability		1,143	6,088			0,854
SYS1	0,517			-1,38	2,129	
SYS2	0,601			-0,81	0,775	
SYS3	0,811			-0,66	0,059	
SYS4	0,781			-0,54	-0,101	
Information Quality		1,037	5,959			0,874
INQ1	0,629			-0,56	0,082	
INQ2	0,732			-0,67	0,134	
INQ3	0,661			-0,38	-0,153	
INQ4	0,491			-0,88	0,724	
Fulfillment		1,449	6,748			0,925
FUL1	0,825			-0,86	0,666	
FUL2	0,853			-0,75	0,413	
FUL3	0,728			-0,83	0,447	
Privacy		19,648	12,567			0,926

PRI1	0,749			-0,46	-0,048	
PRI2	0,808			-0,44	-0,141	
PRI3	0,844			-0,61	0,13	
PRI4	0,813			-0,42	-0,149	
PRI5	0,782			-0,49	0,091	
PRI6	0,634			-0,74	0,304	
PRI7	0,597			-0,22	-0,192	
Satisfaction		1,335	6,256			0,909
SAT1	0,431			-0,94	1,893	
SAT2	0,458			-0,66	0,592	
SAT3	0,521			-0,86	1,603	
SAT4	0,638			-0,49	0,035	
SAT5	0,612			-0,83	1,154	
SAT6	0,605			-0,55	0,144	
Trust		0,757	2,965			0,873
TRU5	0,543			-0,74	0,849	
TRU6	0,597			-0,51	0,187	
Reputation		1,656	7,871			0,911
REP1	0,749			-1,09	1,888	
REP2	0,745			-0,8	0,651	
REP3	0,628			-0,56	0,403	
REP4	0,747			-1,27	2,266	
Purchase Intention		0,827	3,907			0,875
INT1	0,773			-0,83	0,28	
INT2	0,692			-1,01	1,151	
Loyalty		3,227	10,363			0,917
LOY1	0,861			0,012	-0,738	
LOY2	0,845			-0,11	-0,748	
LOY3	0,793			-0,56	-0,133	
LOY4	0,735			-0,68	-0,029	
LOY5	0,791			-0,26	-0,321	
LOY6	0,659			-0,59	0,038	
Positive WOM		0,87	4,288			0,844
WOM3	0,894			-0,41	-0,154	
WOM4	0,871			-0,72	0,202	

To decide on the confirmatory factor analysis (CFA) estimation method, these 45 items were examined from the point of their skewness and kurtosis, as given in Table 3. As a result, Maximum Likelihood (ML) estimation has been used, given that skewness is not treated differently across items, there aren't strong violations from the normality, skewness values are not at different directions, and most of the absolute values of them are less than 1.

After all, there were no potentially problematic items that might prevent successful CFA.[54] proposed a two-step model building approach. Initially, CFA was used to confirm the measurement model by determining the reliability, convergent validity, and discriminant validity of the factors. If measurement model was confirmed, then, an assessment of predictive validity was maintained with addition of structural relationships between the constructs based on the hypothesis given on the defined model [55].

In the measurement model, the chi-square value was significant (1780.51) with 874 degrees of freedom at p-value = 0.000. The $\chi 2/df$ found as 2.04 indicating a good fit within the defined range of 2-3. Normally, the specified fits were sufficient, including RMSEA (below 0.05 shows a close fit) = 0.044 with p= 1.0, and SRMR (below 0.05 shows a good fit) = 0.039, CFI (above 0.95 shows a good fit) = 0.96, NFI (the value in between 0.90 and 0.95 indicates acceptable fit) = 0.92. "Comparing the absolute and incremental fit indices with the generally recognized levels, confirmation of the measurement model was provided" [56]. Until now, the CFA results pointed out acceptable data-model fit, the evaluation of validity and reliability can be go ahead by using the estimates from CFA.

Table 4. CFA Estimates for the items, AVE (average variance extracted) and composite reliability for the factors

Factors - Items	Std. Factor Loadings	Std. Error	t-value	R^2	AVE	Composite Reliability
Efficiency					0,529	0,849
EFF1	0,653	-	-	0,43		
EFF2	0,789	0,020	39,377	0,62		
EFF3	0,702	0,025	27,890	0,49		
EFF4	0,751	0,022	34,159	0,56		
EFF5	0,736	0,022	32,780	0,54		
System Availability					0,578	0,843
SYS1	0,839	-	-	0,70		
SYS2	0,865	0,015	57,005	0,75		
SYS3	0,641	0,027	23,587	0,41		
SYS4	0,669	0,026	25,992	0,45		
Information Quality					0,635	0,874
INQ1	0,788	-	-	0,62		
INQ2	0,776	0,019	40,320	0,60		
INQ3	0,791	0,019	42,710	0,63		
INQ4	0,828	0,017	47,885	0,69		
Fulfillment					0,754	0,902
FUL1	0,820	-	-	0,67		
FUL2	0,843	0,017	50,490	0,71		
FUL3	0,938	0,014	66,487	0,88		
Privacy					0,637	0,924
PRI1	0,779	-	-	0,61		
PRI2	0,790	0,018	44,113	0,62		
PRI3	0,874	0,012	71,425	0,76		
PRI4	0,856	0,013	65,542	0,73		
PRI5	0,894	0,011	82,749	0,80		
PRI6	0,749	0,020	37,546	0,56		
PRI7	0,607	0,028	21,946	0,37		
Satisfaction					0,629	0,91
SAT1	0,834	-	-	0,70		
SAT2	0,846	0,014	61,778	0,71		
SAT3	0,878	0,012	74,756	0,77		
SAT4	0,720	0,022	33,213	0,52		
SAT5	0,813	0,016	51,124	0,66		
SAT6	0,643	0,026	24,934	0,41		
Trust					0,776	0,874
TRU5	0,895	-	-	0,80		
TRU6	0,867	0,015	57,482	0,75		
Reputation					0,741	0,919
REP1	0,929	-	-	0,86		
REP2	0,903	0,010	93,048	0,81		
REP3	0,800	0,018	45,184	0,64		
REP4	0,804	0,016	50,234	0,65		
Purchase Intention					0,792	0,883
INT1	0,815	-	-	0,66		
INT2	0,959	0,015	66,050	0,92		
Loyalty					0,629	0,909
LOY1	0,633	-	-	0,40		
LOY2	0,687	0,024	29,056	0,47		
LOY3	0,878	0,012	73,638	0,77		
LOY4	0,885	0,011	77,474	0,78		
LOY5	0,818	0,016	52,237	0,67		
LOY6	0,824	0,015	53,661	0,68		
Positive WOM					0,736	0,848
WOM3	0,806	-	-	0,65		
WOM4	0,907	0,034	26,485	0,82		

At first, in order to compute the convergent validity, the average variance extracted (AVE) proposed by [57] was calculated for each factor as shown Table 4. All the items were loaded on the intended factors at the p-value < 0.01, standardized factor loadings of all items shown in Table 4 were between 0.607 and 0.959, and all the corresponding t values > 7.25 of critical value at 0.01 significance. Depending on the factor loadings of all items and all the AVEs exceeded the adequate convergent validity of 0.50 [51], and high composite reliabilities (CR) of all factors found in between 0.843 and 0.924, higher than the proposed level of 0.70; therefore convergent validity is established.

Then, discriminant validity among factors was evaluated using "*the strategy of* [57] *by comparing the squared root of the AVE for each factor shown on the diagonal of Table 5 with the correlations shown below the diagonal, the Pearson correlations between the mean scores of each factor*". The squared roots of the AVEs for the factors were larger than the correlations between a given factor and others. Hence, discriminant validity was proved except Efficiency and Information Quality factors.

Table 5. Table for discriminant validity

	EFF	SYS	INQ	FUL	PRI	SAT	TRU	REP	INT	LOY	WOM
Efficiency	0.73	0.62	0.63	0.51	0.46	0.65	0.50	0.54	0.51	0.36	0.30
System Availability	0.80	0.76	0.60	0.48	0.44	0.55	0.46	0.49	0.45	0.29	0.21
Information Quality	0.79	0.75	0.80	0.58	0.55	0.71	0.56	0.60	0.51	0.43	0.38
Fulfillment	0.66	0.63	0.70	0.87	0.44	0.61	0.46	0.53	0.41	0.34	0.29
Privacy	0.57	0.54	0.64	0.54	0.8	0.60	0.62	0.55	0.45	0.43	0.30
Satisfaction	0.82	0.71	0.85	0.74	0.69	0.79	0.65	0.66	0.58	0.51	0.40
Trust	0.61	0.55	0.70	0.59	0.72	0.77	0.88	0.63	0.49	0.44	0.31
Reputation	0.67	0.64	0.71	0.61	0.62	0.78	0.72	0.86	0.55	0.43	0.36
Purchase Intention	0.64	0.58	0.63	0.51	0.52	0.72	0.61	0.67	0.89	0.50	0.37
Loyalty	0.49	0.39	0.54	0.42	0.53	0.64	0.56	0.52	0.6	0.79	0.33
Positive WOM	0.35	0.27	0.44	0.33	0.33	0.43	0.36	0.39	0.4	0.36	0.86

Another method used for calculating the discriminant validity was the chi-square difference test. [54] propose that "the parameter estimate for two factors be constrained to 1.0 (constrained model) and compared to a model where this parameter is freely estimated (unconstrained model)". This test is then realized for every possible pairing of factors in a study.

In the unconstrained model, chi-square was calculated as 1780.51 and degrees of freedom as 874 in this study. The chi-square differences were calculated for efficiency and system availability ($\chi2$ = 1952.75-1780.51 = 172.24), efficiency and satisfaction ($\chi2$ = 1976.74 - 1780.51 =196.23), efficiency and information quality ($\chi2$ = 1945.95-1780.51 = 75.44), and also for satisfaction and information quality ($\chi2$ = 1939.30-1780.51 = 158.79). "*If the differences of chi-squares calculated were greater than 3.84 as stated by* [58], *then the hypothesis' of the correlation between the given pairs of factors equal to 1 were rejected towards the discriminant validity*" and the discriminant validity was also achieved between these pairs.

3.4. Results of the proposed model

Those analysis results given above approve the validity and reliability of the measurement model and prepare a stable base for investigating the structural relationships required to analyze the hypotheses.

Results of the structural model fit showed a good fit in the data; the chi-square value was significant (1841.01) with 892 degrees of freedom at p-value = 0.0 (<0.05). The $\chi2$/df found as 2.06 indicating good fit within the defined range of 2.0-3.0. Mainly, the specified fits were sufficient, including RMSEA (below 0.05 shows a good fit) = 0.045 with p= 1.0, and SRMR (below 0.05 shows a good fit) = 0.039, CFI (above 0.95 shows a good fit) = 0.96, NFI (the value in between 0.90 and 0.95 indicates acceptable fit) = 0.92. Comparing the absolute and incremental fit indices with the main accepted levels, confirmation of the structural model was provided [55].

Full structural equation model was calculated simultaneously loading the relationships hypothesized given in the Figure 1 to structural model by using Mplus 6.1. [59] suggested the use of bootstrapping in addition to classical hypothesis testing in an indirect effects research. As recommended, bootstrap confidence intervals (CI) based on 5000 bootstrap samples used together with the product coefficients approach in this study. The significance of a path is identified by the p value ($p<0.05$) in classical hypothesis testing, and when the bootstrap CI is excluding zero, a path is significant and supported in bootstrap approach. The research hypotheses of the proposed model that are found statistically significant and empirically supported are shown in Table 6 with ML estimates and bootstrap CI results.

Table 6. Path coefficients and bootstrap CI results for the hypothesis empirically supported in the proposed model grouped as direct and indirect effects

Hypothesis	Path Coefficients				Bootstrap 95% CI ***	
Direct Effects	Estimate(Std.)	Std. Error	t-value	p-value	Lower	Upper
H_{1c} : INQ → TRU	0.313 (0.272)	0.088	3.565	0.000**	0.124	0.501
H_{1e} : PRI → TRU	0.382 (0.353)	0.050	7.684	0.000**	0.282	0.492
H_{4a} : EFF → SAT	0.342 (0.317)	0.068	5.002	0.000**	0.201	0.518
H_{4c} : INQ → SAT	0.246 (0.266)	0.058	4.234	0.000**	0.125	0.380
H_{4d} : FUL → SAT	0.126 (0.152)	0.032	3.971	0.000**	0.046	0.206
H_{10e} : PRI → LOY	0.149 (0.150)	0.057	2.630	0.009**	0.023	0.278
H_{13b} : SYS → WOM	-0.245(-0.223)	0.110	-2.221	0.026*	-0.482	-0.014
H_{13c} : INQ → WOM	0.424 (0.355)	0.142	2.994	0.003**	0.160	0.741
H_{2} : REP → TRU	0.351 (0.323)	0.055	6.382	0.000**	0.219	0.471
H_{5} : REP → SAT	0.144 (0.164)	0.037	3.921	0.000**	0.053	0.233
H_{8} : REP → INT	0.292 (0.255)	0.068	4.307	0.000**	0.148	0.444
H_{6a} : TRU → SAT	0.140 (0.174)	0.039	3.599	0.000**	0.054	0.215
H_{3a} : SAT → INT	0.554 (0.425)	0.151	3.667	0.000**	0.224	0.888
H_{3b} : SAT → LOY	0.497 (0.437)	0.150	3.311	0.001**	0.175	0.852
H_{9a} : INT → LOY	0.275 (0.315)	0.053	5.220	0.000**	0.120	0.425
Indirect Effects						
H_{18c} : INQ → TRU → SAT	0.044 (0.047)	0.017	2.597	0.009**	0.011	0.085
H_{18e} : PRI → TRU → SAT	0.053 (0.061)	0.017	3.235	0.001**	0.018	0.087
H_{19a} : EFF → SAT → INT	0.189 (0.135)	0.064	2.982	0.003**	0.076	0.353
H_{19c} : INQ → SAT → INT	0.137 (0.113)	0.050	2.752	0.006**	0.047	0.271
H_{19d} : FUL → SAT → INT	0.070 (0.065)	0.026	2.664	0.008**	0.019	0.142
H_{20a} : EFF → SAT → LOY	0.170 (0.138)	0.062	2.748	0.006**	0.047	0.371
H_{20c} : INQ → SAT → LOY	0.123 (0.116)	0.046	2.654	0.008**	0.037	0.237
H_{20d} : FUL → SAT → LOY	0.062 (0.067)	0.025	2.536	0.011*	0.015	0.134
H_{22d} : REP → TRU → SAT	0.049 (0.056)	0.016	3.090	0.002**	0.014	0.088
H_{23a} : REP → SAT → INT	0.080 (0.070)	0.029	2.716	0.007**	0.021	0.154
H_{23b} : REP → SAT → LOY	0.071 (0.072)	0.028	2.530	0.011*	0.016	0.160
H_{24c}: INQ → TRU → SAT→ INT	0.024 (0.020)	0.011	2.142	0.032*	0.005	0.059
H_{24e}: PRI → TRU → SAT→ INT	0.030 (0.026)	0.012	2.457	0.014*	0.008	0.062
H_{25c}: INQ → TRU → SAT→ LOY	0.022 (0.021)	0.011	2.045	0.041*	0.004	0.052
H_{25e}: PRI → TRU → SAT→ LOY	0.027 (0.027)	0.011	2.316	0.021*	0.007	0.055
H_{31a}: REP → TRU → SAT → INT	0.027 (0.024)	0.011	2.393	0.017*	0.006	0.059
H_{31b}: REP → TRU → SAT → LOY	0.024 (0.024)	0.011	2.261	0.024*	0.005	0.055
H_{32a}: REP → INT → LOY	0.080 (0.080)	0.025	3.262	0.001**	0.030	0.151
H_{36} : SAT →INT → LOY	0.152 (0.134)	0.049	3.139	0.002**	0.057	0.288
* p<0.05, ** p<0.01, *** Bootstrap CI based on 5000 resamples						

In this research, the structural model explains 86% of the variance (R2) in satisfaction, 67% of the variance in trust, 56% of the variance in purchase intention, 48% of the variance in loyalty, and 25% of the variance in positive WOM.

Regarding H1; e-service quality dimensions, efficiency (=0.317 p<0.01), information quality (=0.266 p<0.01), and fulfillment (=0.152 p<0.01) have significant direct effects on satisfaction except system availability and privacy. Efficiency has the strongest effect on satisfaction. In contrast, H4, e-service quality dimensions, information quality (=0.272 p<0.01) and privacy (=0.353 p<0.01) have significant direct effects on trust. On the other hand, e-service quality dimensions have no direct effect on purchase intention and the hypothesis H7 is rejected. Besides H10; only e-service quality dimension privacy (=0.150 p<0.01) has significant direct effect on customer loyalty and H13; only system availability (=-0.023 p<0.05) and information quality (=0.355 p<0.01) have significant direct effects on positive WOM.

Furthermore, the company reputation also has the strongest direct effect on trust (H6=0.323 p<0.01) in this study. Additionally, the company reputation has significant direct effects on satisfaction (H2=0.164 p<0.01) and on purchase intention (H8=0.255 p<0.01); but no direct impacts on loyalty (H11) and on positive WOM (H14).

Regarding H6, trust has significant effect on satisfaction (=0.174 p<0.01), and unfortunately, trust has no direct impact on customers' behavioral intentions. In contrast, H3, satisfaction has significant direct effects on purchase intention (=0.425 p<0.01) and on loyalty (=0.437 p<0.01); and in H9, purchase intention has significant direct impacts on loyalty (=0.315 p<0.01), but not on positive WOM. Therefore, the hypothesis H3c and H12 related to the direct effect of satisfaction and loyalty on positive WOM are rejected.

As shown in Table 6, the simultaneous indirect effects of e-service quality dimensions and the company reputation on behavioral intentions through satisfaction and / or trust are also examined.

E-service quality dimensions, information quality (=0.047 p<0.01) and privacy (=0.061 p<0.01) have significant indirect effects on satisfaction via trust. E-service quality dimensions, efficiency (=0.135 p<0.01), information quality (=0.113 p<0.01), and fulfillment (=0.065 p<0.01) have significant indirect effects on purchase intention via satisfaction. On the other hand, the same e-service quality dimensions, efficiency (=0.138 p<0.01), information quality (=0.116 p<0.01), and fulfillment (=0.067 p<0.05) have significant indirect effects also on loyalty via satisfaction. The strongest indirect effect within the e-service quality dimensions, both on purchase intention and on loyalty over satisfaction, is efficiency. Besides e-service quality dimensions, information quality (=0.020 and =0.021 p<0.05) and privacy (=0.026 and =0.027 p<0.05) have significant indirect effects both on purchase intention and loyalty via trust and satisfaction.

On the other hand, the company reputation has significant indirect effect on satisfaction (=0.056 p<0.01) via trust. The company reputation also has significant indirect effects both on purchase intention (=0.070 p<0.01) and loyalty (=0.072 p<0.05) via satisfaction. Additionally, the company reputation has significant indirect effects on purchase intention (=0.024 p<0.05) and loyalty (=0.024 p <0.05) via trust and satisfaction. Furthermore, company reputation (=0.080 p<0.01) and customer satisfaction (=0.134 p<0.01) have significant indirect effects on loyalty via purchase intention. However, the other hypotheses listed in Appendix-1 were rejected.

4. Conclusion

Turkish e-commerce sector keeps going to widen enormously in the last decade with the developments in technology and the growth in the number of internet users. With its population of 83.6 million and the 79 percent ratio of Internet users [1], Turkey has a big potential than most European countries; however the trade volume it generates is not at the desired level.

The purpose of this research was to empirically examine and investigate variations in Turkish customers' behavioral intentions that could be related to e-service quality dimensions (efficiency, system availability, information quality, fulfillment and privacy) and a company's reputation via creating satisfaction and trust, in order to understand the reasons of those low ratios within the Turkish e-commerce sector.

Succeeding in the global market is the main goal of all companies. Hence, e-retailers have to pay necessary intention to e-service quality and its dimensions in detail for a better evaluation of advantages and drawbacks in order to success. [21] found that efficiency and fulfillment were the most critical, and equally important, aspects of e-service quality. In contrast to those results, in the current study, e-service quality dimensions, efficiency, fulfillment, and information quality have significant positive effects on customer satisfaction and have significant positive indirect impacts on customer purchase intention and loyalty via satisfaction. Efficiency is the most effective dimension of e-service quality effecting satisfaction and fulfillment is the second in this study. Just like the showcase of a store in traditional retailing, efficiency in e-retailing forms the first impression about the company. A good website design is important to give the initial impact to customers, therefore e-retailers should develop websites with speedy, informative, and easy-to-navigate features. In addition, improving the fulfillment is another important aspect that will effect customers, such as displaying up-to-date and accurate information, delivering the products as promised consistent with the given information, and protecting personal information by using known security protocols.

As suggested by many authors such as [48], [49] and [41], an increase in customer satisfaction has an impact on repurchase intentions, loyalty, and positive WOM where the results of this study is consistent with them, except positive WOM. In various e-service contexts proved by [41], [42] and [11]; customer satisfaction has influenced customer behavioral intentions as a consequence of a consistent positive effect on customer loyalty consequently.

Furthermore, it is found that trust has a remarkable impact on satisfaction in this study which is consistent with that of [14], who found trust as key driver of perceived service quality and customer satisfaction. While considering trust, privacy and information quality are found to be the most important dimensions effecting trust in this study which means that reducing the customers' anxiety about the illegal spreading of personal information and transaction data brings an increased level of trust.

Additionally, the company reputation has the strongest direct effect on trust in this study which means that the perceptions of reputation received from the high quality website will generate a higher levels of trust.

In contrast with the privacy-trust-behavioral intention model in [35]'s study, this study proves that privacy and information quality effect purchase intention and loyalty by providing trust and satisfaction together. However, in this research, trust does not appear to play an imperative role on behavioral intentions directly, by contrast with many authors such as [15]. This result demonstrates that the ambiguity in the legal regulations inhibits the operations of the e-commerce companies which makes lack of customer trust worse. The laws related to e-commerce, such as the Law on Electronic Commerce and the Distance Sale Agreements Regulation, were newly developed in Turkey and entered into force in 2016 and 2015 respectively, which will positively affect the growth of the e-commerce sector in Turkey.

On the other hand, many studies proved that satisfaction, loyalty, quality, commitment, trust, and perceived value have had the positive influences as the antecedents of WOM; but according to [49], there is still a lack of integration among the bivariate relationships involving WOM. Hence, contrary to this study's prediction and those of prior research, the results point out that the antecedents of positive WOM defined in the present study do not have any influence either directly or indirectly on positive WOM, except the direct impacts of system availability and information quality.

4.1. Managerial implications

The results of this study have some hints for managers of e-retailing operations especially in Turkey that offers an encouraging future in the e-commerce sector with its growing population and the number of internet users.

Furthermore, it is crucial for e-retailers to realize the way in which people shop online and also to understand how e-service quality influences customer behavior. Managers must recognize that the company's website is similar to a traditional store when considered the layout and dynamics and they have to find creative methods to retain the customers. Certainly, if the complexity of system feature and the difficulty to use the services weaken the e-service quality as supported by [18], which claims that problem related to technical functioning of the site lead to frustration and possible user exit. In other words, if e-customers think that website of the company is not user-friendly, has a bad design, and displays inaccurate information, then it is not possible to retain them in the company most probably.

Another inference for managers and designers is that satisfaction is the most important component in the customer's world for sustaining and improving relationships. For raising customer satisfaction and gaining their trust, operations strategies that will lead to positive behavioral intentions should be developed carefully that will enhance the e-retailers' competitive advantage. According to [11], e-retailers would need to offer products that are aligned with customers' taste, preference and trends in order to increase their satisfaction and commitment. As a sum up, when e-customers are satisfied, then they are possibly the loyal customers who, come back to the website and recommend the service received to the others. In addition, the information quality and privacy of the websites can be enhanced by using the well-known Verisign label in order to improve customers' behavioral intentions indirectly which will also make e-retailer's reputation better.

In today's more interconnected environment, e-WOM, whether is negative or positive, is known to have a stronger impact on customers and an e-retailer's reputation is shared rapidly in detail. Managers also need to develop new strategies to manage e-WOM.

4.2. Limitations and suggestions for further research

This research has also limitations like the other studies. For example, collecting all measures simultaneously is a limitation because of this research's cross-sectional design. In order to understand how customers' feelings and realizations of e-service quality change over time, a longitudinal study could be developed. In addition, this study is used the existing scales for measuring the dimensions of e-service quality. Developing a new e-service quality scale might be considered for further research.

E-commerce is a global service. Within this study, only Turkish customers' perceptions were considered. In order to investigate relevant cultural and ethnic characteristics, future research could explore the cross-cultural effects under the e-commerce context.

Overall, it is important for the e-retailers to see the close relationships among e-service quality, reputation, satisfaction, and trust in the enhancement of customers' behavioral intentions. Therefore, these results can assist e-retailers realizing the role of reputation and all five distinct dimensions of e-service quality in building satisfaction, trust, and behavioral intentions. In summary, the findings of this study lead the practitioners and e-retailers about which factors they can give importance while developing customer strategies.

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APPENDIX – 1 - Indirect Impacts

H_{15-17}: E-service quality dimensions (a.efficiency, b.system availability, c.information quality d.fulfillment, e.privacy) have positive indirect impacts on customers' behavioral intentions (purchase intention$_{15}$, loyalty$_{16}$ and positive WOM$_{17}$) via customer trust.

H_{18}: E-service quality dimensions (a.efficiency, b.system availability, c.information quality d.fulfillment, e.privacy) have positive indirect impacts on customer satisfaction via customer trust.

H_{19-21}: E-service quality dimensions (a.efficiency, b.system availability, c.information quality d.fulfillment, e.privacy) have positive indirect impacts on customers' behavioral intentions (purchase intention$_{19}$, loyalty$_{20}$ and positive WOM$_{21}$) via customer satisfaction.

H_{22}: Company reputation has positive indirect impacts on customers' behavioral intentions (a.purchase intention, b.loyalty and c.positive WOM) and on customer satisfaction (d) via customer trust.

H_{23}: Company reputation has positive indirect impacts on customers' behavioral intentions (a.purchase intention, b.loyalty and c.positive WOM) via customer satisfaction.

H_{24-26}: E-service quality dimensions (a.efficiency, b.system availability, c.information quality d.fulfillment, e.privacy) have positive indirect impacts on customers' behavioral intentions (purchase intention$_{24}$, loyalty$_{25}$ and positive WOM$_{26}$) via customer trust and satisfaction.

H_{27-28}: E-service quality dimensions (a.efficiency, b.system availability, c.information quality d.fulfillment, e.privacy) have positive indirect impacts on customer loyalty$_{27}$ and on customers' positive WOM$_{28}$ via customer's purchase intention.

H_{29}: E-service quality dimensions (a.efficiency, b.system availability, c.information quality d.fulfillment, e.privacy) have positive indirect impacts on customers' positive WOM via loyalty.

H_{30}: E-service quality dimensions (a.efficiency, b.system availability, c.information quality d.fulfillment, e.privacy) have positive indirect impacts on customers' positive WOM via customer's purchase intention and loyalty.

H_{31}: Company reputation has positive indirect impacts on customers' behavioral intentions (a.purchase intention, b.loyalty and c.positive WOM) via customer trust and satisfaction

H_{32}: Company reputation has positive indirect impacts on customer loyalty (a) and on customer's positive WOM (b) via customer's purchase intention.

H_{33}: Company reputation has positive indirect impacts on customer's positive WOM via customer loyalty.

H_{34}: Company reputation has positive indirect impacts on customer's positive WOM via customer's purchase intention and loyalty.

H_{35}: Customer trust has positive indirect impact on customer loyalty via purchase intention.

H_{36}: Customer satisfaction has positive indirect impact on customer loyalty via customer's purchase intention.

H_{37}: Customer trust has positive indirect impacts on customer's positive WOM via customer's purchase intention and loyalty.

H_{38}: Customer satisfaction has positive indirect impacts on customer's positive WOM via customer's purchase intention and loyalty.

H_{39}: Customer's purchase intention has positive indirect impacts on customer's positive WOM via customer loyalty.