

Consumer Trust Impact on Online Shopping Intent¹

Tüketici güveninin online alışveriş niyetine etkisi

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The Internet is advancing rapidly in terms of becoming a distribution channel which can be easily accessed through consumers by virtue of the easy search functions, thus eliminating geographic boundaries and providing products and services with the most affordable prices and costs to the masses. Trust is a critical factor in any relationship since the essence of trade is establishment of mutual trust. Trust has a significant role in terms of realization of the shopping as well as continuity of the relationship as buyers and sellers implement the transactions without seeing each other in electronic commerce. The purposes of this research clarify the impact of consumers' trust in online shopping on their intention as to shopping. Explanatory factor analysis has been applied to reveal the dimension of the trust for online shopping. Regression analysis has been performed for the determination of trust on online shopping intention. According to the results obtained in this study, three factors consisting of security systems used in website, the website's reputation and the visuality and design of the website have been found to have impact on intention of online shopping.

Keywords: Trust, online consumer, online shopping.

Jel Codes: M31.

İnternet tüketicilerin kolaylıkla erişebildiği, coğrafik sınırları ortadan kaldıran kolay arama fonksiyonlarıyla ürün ve hizmetleri en uygun fiyat ve maliyetle çok büyük tüketici kitlelerine ulaştırabilen bir dağıtım kanalı olma yolunda çok hızla ilerlemektedir. Güven her ilişkide kritik faktör olduğu gibi, ticaretin de olmazsa olmazı karşılıklı güven tesisinin sağlanmasıdır. Elektronik ticarete alıcı ve satıcı birbirlerini görmeksizin iş yaptıklarından, güvenin alışverişin gerçekleşmesi ve ilişkilerin sürdürülmesi açısından rolü büyüktür. Bu araştırmanın temel amacı; tüketicilerin elektronik alışverişe duydukları güvenin, alışveriş yapma niyeti üzerindeki etkisini ortaya koymaktır. Online alışverişe karşı duyulan güvenin boyutlarını ortaya koymak amacıyla açıklayıcı faktör analizi uygulanmıştır. Online güvene ait tutumlarının alışveriş niyeti üzerindeki etkisinin belirlenmesi için basit regresyon analizi yapılmıştır. Bu çalışmadan elde edilen sonuçlar; web sitelerinde kullanılan güvenlik sistemleri, web sitesinin ünü, web sitesinin görselliği ve tasarımından oluşan üç online güven boyutunun online alışveriş yapma niyeti üzerinde etkili olduğunu göstermektedir.

Anahtar Kelimeler: Güven, online tüketici, online alışveriş.

Jel Kodları: M31.

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1. INTRODUCTION

Trust is conceptualized as existing when one party has trust in an exchange partner's reliability and integrity (Morgan and Hunt, 1994). Hosmer (1995) has defined trust as an ethical behavior expectation based on the fact that the trusted party will behave correctly in terms of ethics and ethical behavior demand as to trust from the trusted party (ethically correct decisions and actions based on the analysis of ethical principles). Trust the one hand, would benefit personally from the opposite side, or at least not to abuse or loss of property that is defined as being in positive expectations (Rousseau et al., 1998). Trust, between the buyers and sellers during the shopping process realized in electronic media, has a great role in terms of realization of the shopping and maintenance of continuous relationship. Security issue is the barrier as regards the potential online shopping of the consumers in electronic media. As such, trust emerges as an important factor in the online shopping decision of the consumers.

2. ONLINE TRUST DIMENSIONS

Trust is a governance mechanism in relationships concerning exchanges. It is characterized by uncertainty, vulnerability or dependence (Jarvenpaa et al., 2000). Despite impressive improvements in online shopping difficulty remains in making the user to click the purchase (Hoffman et al., 1999). Security issue is one barrier in regards to the potential Internet shopping for the consumers. It is observed that trust is an important factor in the decisions of consumers shopping on the Internet when the literature is perused. In this study online trust is discussed in four dimensions as trust perception of the person, website design and product information, reputation of the website as well as recommendations incident to the website and the website's security.

2.1. Trust Perception of the Person

Trust in the individual namely psychological sense shows personality-centered feature formed by life experiences, established feelings or beliefs of individuals (Tan and Sutherland, 2004). In this respect, should the consumer have a feeling of low trust depending on the personal experiences thereof this situation will be reflected in the shopping thereof as well. A consumer not trusting the environment will be expected to exhibit the same attitude also to online shopping.

2.2. Website Design and Product Information

Website design attracts the attention of consumers as well as affecting the trust (Roy, et al., 2001). Website design comprises six phases:

- 1) Browsing tools such as search engine, site map and search results page provide convenience to the consumers making research.
- 2) Mutual interaction and communication mechanism allows communication between consumers, sellers, site administrators and other consumers.
- 3) Security and privacy statement denotes that the shopping website has to ensure that the consumers' information will be kept confidential.

- 4) Revealing the structure of the company denotes providing accurate information as to the company e.g. Company history.
- 5) Product information should contain current and correct information about the product; e.g. Displaying an image of the product and product's description.
- 6) Information respecting the purchase process denotes explaining the buying process step by step; e.g. providing information as to in how many days the delivery will take place, return process and etc. The search engine, security and privacy statement and information to the purchase process of products, in particular, are the most important factors having impact on the trust of the consumer to the website (Huang and Chang, 2004).

2.3. Reputation of the Website

Reputation in online retailing has often been used as an indicator of consumer trust in the company (Doney and Cannon, 1997). According to Lewit (1965) trust and popularity of the organization represent the reputation of the organization. If main features and physical and functional properties of a product are not known, brand name is the most important factor in providing consumer with confidence (Caruana, 1997). Previous researches have revealed that a brand shortens the thinking time of a consumer and reduces the dependency to prices and the perceived risk. If store owners make the consumer feel that they care about same and if consumers also believed that they are treated honestly their trust coefficient will increase. Therefore, the electronic shopping websites affect the reputation of the organization while online shopping affects the consumers.

2.4. Security Systems

Fear of online fraud is just one of the reasons for avoidance of most customers with respect to bringing shopping in the digital environment to their minds. The moment client fears of exploitation of the money or credentials thereof the risk, albeit small, outweighs the benefits (Dayal, et al., 1999). When the consumers make shopping via Internet they are required to share their financial and personal information with the attendant shopping website during the registration and payment transactions. Details as to address, credentials and credit card are important information from the perspective of consumers and may create problems such as fraud or unauthorized access and etc. for individuals in cases where same are not under protection. However, online shopping seems to be a promising means in case of encouraging consumers for online commercial activities while securing their personal information. This will also lead to a long-term solution additionally. Personal information will be under the control of the consumers and companies will be rewarded with an increasing sense of loyalty as well as willingness and intentness and consumer trust. Further, healthy development of the electronic marketing will be maintained through contribution of the increasingly rising standards of IT and network technology (Hoffman, et al., 1999).

3. METHODOLOGY

3.1. Design Methods and Sampling

Trust in the process of online shopping is affected through many variables including the seller related factors, factors related to the website, factors incident to buyers, factors related to mediators and their sub-dimensions. The study has been created by taking into

consideration the cited factors affecting consumer trust in online shopping . In this context, the main purpose of the study is to reveal; the impact of consumers' trust in online shopping on their intention as to shopping. The study has three sub-steps in line with this main purpose:

- Determination of the dimensions of trust of the participants to the website and the seller in the process of making purchases in online,
- Determination of the intentions of the participants as to do shopping in online,
- Determination of impact of the dimensions of trust of the participants on their intention as to shopping in online.

Data in the study has been collected by means of face-to-face survey with a sample group of 500 people in the Eskisehir province of Turkey. In the study, convenience sampling method was employed in order to create a target-oriented sample group and sample size calculated on the basis of taking into consideration 95% trust interval and 5% sampling error (www.surveysystem.com/ssca) is 384. 500 questionnaires distributed considering the rate of return and 475 questionnaires were analyzed. Explanatory Factor Analysis has been applied with an eye to reveal the dimension of the trust of the participants regarding making online shopping and four factors in the formation of trust have been obtained. Correlation analysis has been performed incident to the relationship between the factors. Regression analysis has been conducted for the determination of the impact of trust attitudes of the participants on their online shopping intention.

4. FINDINGS

4.1. Demographic Characteristics of Participants

Distribution of demographic and socio-economic variables of participants with regard to gender, age, income and education are displayed in Table 1.

Table 1: Demographic and Socio-Economic Features of the Participants

Group (n=475)	Variables	Percent
Gender	Female	52,6%
	Male	47,4%
Age	18-25	41,9%
	26-35	34,9%
	36-45	15,6%
	46-55	5,7%
	56 and over	1,9%
Education	Elementary School	1,3%
	High School	13,7%
	Vocational College and Faculty	72,4%
	Master and PhD	12,6%
Monthly Income (TL)	Less than 750	18,7%
	751-1500	35,6%
	1501-2500	29,1%
	2501-3500	12,4%
	3501-4500	2,5%
4501 and over	1,6%	

Socio-demographic features of the 475 participants who answered the measurement device are given in Table 1 below. The gender breakdown for the sample is 52% of female and 48% of male. Regarding the age distribution of the respondents; 42% of the sample is in 18-25 age range, 35% in 26-35 age range and 16% in 36-45 age range. There are a few people (1%) in the sample has primary level education. While 14% of the sample has high school degree, 72% of the sample has vocational or faculty degree. 13% has a master/PhD graduates. Further, the demographics on monthly income identify two dominant categories; 36% of the sample has 750-1500 TL, 29% of the sample has 1501-2500 TL monthly income.

4.2. Exploratory Factor Analysis: Dimensions of Online Trust

Online Trust Scale consisting of 21 expressions has been utilized with a view to reveal the dimensions of trust of the participants to the seller and the website in the process of making purchases on the Internet. Explanatory Factor Analysis has been applied for grouping, classification and conversion into main factors of these 21 expressions measuring the online trust. Results of the Explanatory Factor Analysis are provided in Table 2 below. Sampling adequacy needs to be taken into consideration in application of factor analysis to the Online Trust Scale and Kaiser-Mayer-Olkin (KMO) test is utilized to determine adequacy (Zhang et al. 2003). In this research, KMO was 0, 90 and this rate is adequate for the application of factor analysis. Bartlett Test for Sphericity (BTS) 6176.76 ($p = 0.01$) shows that variance hypothesis and covariance matrix of variables have been rejected as the determinant of a matrix is and that it is suitable for conducting a factor analysis. Four factors within the framework of the related expressions of participants incident to the dimension of the online trust have come to the fore when Table 2 is examined. The first of these is the "Security Systems", the second is "the website's reputation", the third is "the Trust Perception of the Person" and the fourth is "Website Visuality and Design". Reliability of the total of 21 expressions divided into factors as a result of the Factor analysis has been found as (Cronbach's alpha $\alpha = 0, 91$).

Table 2: Dimensions of Online Trust

Factors	Factor Loads (β)	Mean	Stand Dev.	The eigenvalue % of Exp. Variance	Alpha α
Factor 1: Security Systems					
1. I think that the Internet is safe enough and I do not have any reservations incident to shopping	0.82	3.17	0.99		
2. I believe that my personal and financial information are protected by the website from which I make shopping	0.80	3.39	0.96		
3. I trust the websites from which I make shopping	0.79	3.70	0.99		
4. I think that in our day, Internet shopping is safe enough and legally protected	0.77	3.15	0.97		
5. I think that Internet shopping is a safe experience.	0.77	3.32	0.95	5.96 (27.14)	0,92
6. I think that security systems such as SSL and SET, protects the consumers shopping via Internet adequately	0.76	3.41	0.94		
7. I prefer shopping from the websites that use security systems such as SSL and SET	0.71	3.68	0.98		
8. I think that use of security systems such as SSL and SET by businesses operating via Internet increase trust in them.	0.69	3.69	0.88		
9. Websites with various payment options are more reliable for me.	0.57	3.82	0.94		
10. I think that the businesses operating via Internet do this work really well.	0.45	3.13	0.90		
11. I think that many Internet businesses have a positive image in the public.	0.42	3.22	0.98		
Factor 2: The website's reputation					
1. I think that the recommended websites are trustworthy.	0,76	3,89	0.83		
2. The positive reviews I hear about a website increases my trust in that website.	0,72	3,63	0.91	2.9 (13.54)	0.79
3. After-sales services provided by a website increase my trust in that website.	0,69	4.22	0.80		
Factor 3: Trust Perception Person					
1. I'm inclined highly to trust a person or an institution	0,84	2.45	0.98		
2. It is easy for me to trust a person or an institution	0,82	2.24	0.95		
3. It is not hard to trust a person or an institution	0,78	2.24	0.95	2.8 (12.89)	0,84
4. I trust a person or an institution even if I have very little information about them.	0,77	1.98	0.85		
Factor 4 : Website Visuality and Design					
1. The visual features of a website affect my trust on that website.	0.89	2.62	1.07		
2. If a website's design is good, I think the website is reliable.	0.84	2.65	1.09	2.4 (11.23)	0.76
3. Websites with simple designs do not look reliable to me	0.78	3.03	1.09		

1 = Strongly agree 5 = Strongly disagree

Arithmetic average, standard deviation and correlation matrix results as to the attendant factors related to the size of the Online Trust are shown in Table 3. Presence of correlation matrix relationships between factors has been considered as prerequisite of the regression analysis and accordingly a significant relationship ($p > 0.01$) has been found between all factors when correlation matrix of three factors among themselves has been analyzed.

Table 3: Correlation Matrix between Online Trust Factors and Mean

Factors	1	2	3	4	Mean	Stand. Deviation
Factor 1: Security Systems	1				3.45	0.71
Factor 2: Website's reputation	0.63 ** 0.01	1			3.91	0.71
Factor 3: Trust Perception of the Person	0.34 ** 0.01	0.19 ** 0.01	1		2.28	0.77
Factor 4: Website Visuality and Design	0.28 ** 0.01	0.34 0.01	0.14 ** 0.01	1	2.83	0.94

** P <0.01

4.3. Dimension of Consumer Trust Impact on Online Shopping Intent

Regression analysis has been utilized with an eye to determine the impact of dimension of online trust on intention of online shopping. Regression analysis about dimension of consumer trust impact on online shopping intent is shown as Table 4.

Table 4: Dimension of Consumer Trust Impact on Online Shopping Intent

Factors	Dependent Variable					
	The intention of online shopping					
	Std β	t	p	R^2	Setting. R^2	F
Factor 1: Security Systems	0.42	8.71	0.01 **	0.37	0.37	71.49**
Factor 2: Website's reputation	0.18	3.76	0.01 **			
Factor 3: Trust Perception of the Person	0.42	1.07	0.28			
Factor 4: Website Visuality and Design	0.09	2.52	0.05 *			
Intercept		-1.780	0.07			

* P <0.05, ** p <0.01

The impact of dimension of online trust on online shopping intent was found to be statistically significant considering values of the regression analysis values ($F = 71.49$, $p < 0.01$) revealing same. Dimensions of online trust reveals 37% of the entire dependent variable. When examined in terms of standardized beta (β) values as to regression; "Security Systems" factor ($\beta = 0,42$, $p < 0.01$), "Website's reputation" factor ($\beta = 0,18$, $p < 0.01$) and "Website Visuality and Design" factor ($\beta = 0,09$, $p < 0.05$) have impact on a person's intention of online shopping. "Trust Perception of the Person" factor does not have impact ($p > 0.05$) on a person's intention of online shopping.

5. CONCLUSIONS

A number of changes have occurred both for businesses as well as consumers due to the increase in Internet usage, development of technology, globalization and increase in competition in relation with foregoing. New application areas, alternative methods and new competitive forces have commenced to emerge as a result of developments in technology to the field of marketing. Development of the Internet has not only provided companies with new competitive areas but has furnished a new shopping environment to consumers (Özgüven, 2011). Consumers have commenced to demand goods and services via Internet more and more due to increased employment of Internet. Sales through electronic commerce are expected to reach 133 billion dollars in 2015 in Europe, an increase of 10% per year. Furthermore, it is estimated that Internet sales will achieve 279 billion dollars by 2015 in the U.S.A. (Çolak, 2013). Given that the figures correspond to 11% of the total retail sales, an incredible potential to be achieved. Now, electronic media comes to mind when we talk about shopping environments. Concepts of electronic shopping and electronic retailing have come to the fore due to the rapid increases in the number of Internet users. Consumers become more conscious, selective and investigative thanks to developments that take place while businesses have been able to reach more consumers as well as reducing their costs at the same time by virtue of widespread employment of e-retailing and e-commerce. Obtaining benefits incident to saving time and prevention of going to other places which are very essential elements for consumers also have been maximized by electronic commerce. Receipt of products or services to our door without leaving our home or work place has become a requirement rather than luxury inasmuch as the savings of time. However, issues germane to consumer trust also may arise from time to time due to the uncertainty in the Internet environment, risks of purchasing without physical contact with the products and doubts as to sharing financial and personal details.

In our study, three factors consisting of security systems used in websites, reputation the website via which shopping is intended to become and the visuality and design of the website have been found to have impact on intention of online shopping. In the studies carried out it has been found that use of third party verification programs (security systems) to provide security of the websites are important for electronic businesses to provide privacy and security commitments to consumers. The moment client fears of exploitation of the money or credentials thereof the risk, albeit small, outweighs the benefits (Dayal, et al., 1999).

In the survey conducted by Privacy and American Business consumers 91% of the consumers stated that use of third party verification programs by businesses made them feel more comfortable and 84% believed that it was a necessary application for electronic

businesses. 62% of the consumers stated that their concern as to privacy decreased in this way (Harris, 2001 a and b). Reputation of the shopping websites in the written and visual media among consumers, the sharing among the consumers by word of mouth as recommendation, the positive reviews as to the website plays important role in trust of consumers about the website. Website design attracts attention of consumer affects the trust thereof (Roy, et al., 2001). It is observed that there are limited resources -majority of which consist of thesis- in our national literature on e-retailing and e-commerce when the literature is reviewed. Furthermore, no study has been found in the context of the relationship of trust with the intention of buying. Much as there are numerous various studies examining the trust issue from different perspectives, there is a gap in a similar manner on the measurement of intentions of making purchases via Internet in the international sources.

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