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**CONSUMER PERCEPTIONS OF USER EXPERIENCE AND RISK:  
A RESEARCH ON ONLINE SHOPPING**

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*Abstract*

Providing consumers with a web site that leads consumers to perceive less risk, have a satisfying experience, and trigger consumers to purchase online are crucial for e-retailers. Online consumer reviews can be affected by risk perceptions toward a product or e-retailer. Moreover designing a friendly web site can lead consumers to purchase online. In this vein, this study aims to examine the effect of consumer reviews on perceived risk and the mediating role of user experience on the relationship between perceived risk and online purchase intention. 345 fully answered online surveys were collected from participants who purchased single-purchase items via online channels and structural equation modelling was performed for analyses. The findings state that consumer reviews do not have effect on financial risk; however, it is found that consumer reviews reduce perceived convenience risk and increase product risk, and convenience risk affects the tendency for shopping online. Finally, user experience positively mediates the relationship between convenience risk and online purchase intention.

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**Keywords:** Online consumer reviews, online purchase intention, perceived risk, user experience.



## **1. Introduction**

Within the rapid advancement of World Wide Web, online platforms provide an opportunity for consumers to get information about products and services and to compare them. In addition to this, number of consumers who share their personal experiences and opinions on products and services they buy increases day by day. These giant information sources about products and services are offered for consumer using by online retailers. Online shopping has some advantages such as comparing products, accessibility to products for buying whenever consumers want, etc. However, despite the advantages offered, the fact that consumers do not have the chance to examine products, they do not trust online seller, etc. and these negative situations are perceived as risk by consumers. When online reviews are considered in the context of perceived risk, it can be said that consumers use online consumer reviews for eliminating risks that stem from online shopping. Moreover, perceived risk has a key role in online shopping behavior which was proved by previous studies (East, Hammond, & Lomax, 2008; Pavlou, 2003; Vázquez-Casielles, Suárez-Álvarez, & Del Rio-Lanza, 2013).

Considering that purchasing is a process affected by several variables, perceived risk alone would not be enough to explain the intention of the purchase. Research reveals that online purchase intention is affected by community building, satisfaction, switching barriers (Tsai & Huang, 2007), gender and online trust (Thamizhvanan & Xavier, 2013), personality (Bosnjak, Galesic, & Tuten, 2007), web site quality (Hsu, Chang, & Chuang, 2015), perceived value, perceived ease of use, perceived usefulness, firm reputation, privacy, trust, reliability and functionality (Har Lee, Cyril Eze, & Oly Ndubisi, 2011), and web satisfaction (Shukla, Sharma, & Swami, 2010; Park & Kim, 2003). It can be said that some variables which affect online purchase intention such as web site quality and web satisfaction are related to online purchasing platforms. In this context, it is required that characteristics of online platforms and their effect on purchase intention should be examined in detail. When considered from this point of view, user experience is one of the website characteristics. Although various studies examined the direct effect of user experience on purchase intention, the number of mediating effect of user experience studies is quite limited.

The aim of this study is to determine the effect of usefulness of online consumer reviews on perceived risk, the effect of perceived risk on online purchase intention, and finally the mediating effect of user experience on the relationship between perceived risk and online purchase intention by considering the points that are considered incomplete in the literature. Due to the nature of single purchase items, the investigations were conducted in the context of single purchase items.

## **2. Literature Review and Theoretical Framework**

### **2.1. Consumer Reviews**

With the rapid expansion of online shopping, online product reviews have become an effective resource for both customers and retailers (Engler, Winter, & Schulz, 2015). These assessments often include product information and recommendations made by previous users. According to Chen and Xie (2008), evaluations help eliminate product uncertainties for potential buyers. Users can be evaluated in two different ways, such as rating and interpretation (Tang & Guo, 2015). The rating helps quantify the

customer's approach to the product. In contrast, customers with written comments share their positive or negative opinions in detail and are difficult to analyse in terms of vendors (Netzer, Feldman, Goldenberg, & Fresko, 2012). Web retailers can convince customers in two ways: product information written by themselves and experiences shared by users. In the studies conducted, it was concluded that the experiences and recommendations shared by the consumers were more reliable than the information shared by the sellers (Dellarocas, 2003). One possible reason for this could be the more real and neutral perception of consumer assessments by potential buyers.

In the related literature, the ratings and written evaluations of the consumers online were evaluated as Electronic Word of Mouth (E-WOM). Klein (1998) stated that WOM is an effective solution when consumers cannot experience the product before the purchase. Contrary to the time and energy loss in traditional WOM communication, today's use of E-WOM has provided fast and reliable information sharing. In the studies conducted, it was concluded that consumer evaluations had a great effect on the increase of sales of the products in question (Chevalier & Mayzlin, 2006; Ghose & Ipeirotis, 2006; Liu, 2006). In this study, the authors examine the impact of an E-WOM type of communication, which is an E-WOM communication type, on the purchase intention of potential buyers in the context of products such as books, music, movies, and computer games.

## **2.2. Perceived Risk of Online Shopping**

Perceived risk refers to the possible losses that may occur during or after the transaction of the goods and services that the customers intend to purchase (Chen & He, 2003). Keh and Sun (2008) defined the concept of risk as the purchased product does not meet expectations and cause disappointment. Online buyers cannot physically examine, smell or try products, as opposed to traditional purchases. As a result, more risk perceptions are likely to occur than physical stores. The reasons behind the high risk perception of consumers are product instability and financial losses (Barnes, Bauer, Neumann, & Huber, 2007). Unlimited information sharing, which is one of the advantages of the internet today, brings together the problem of trust. In this case, retailers should focus on the risks that adversely affect the purchasing intentions of customers and make improvements to reduce e-commerce (Garbarino & Strahilevitz, 2004).

In this study, the three dimensions of the perceived risk in online purchases were discussed. *Financial Risk*, which is proven to be a major obstacle to online purchases, is defined as a potential loss of money by consumers (Maignan & Lukas, 1997). Today, consumers who do not want to share their credit card information and personal information may lose their confidence in buying because of low trust. *Product Risk* that arises from the inability of consumers to inspect the products they want to buy is one of the issues that is worried about for online purchases. Such risks are defined as the product obtained after the process does not show the expected performance (Kim, Ferrin, & Rao, 2008). Time Risk refers to the loss of time when the product is sent, changed or returned by the consumer (Ko, Jung, Kim, & Shim, 2004). In addition, long-term orders on websites are thought to cause a loss of motivation.

## **2.3. User Experience**

Evaluations toward web sites and mobile applications have emerged with the extensive usage of electronic devices such as personal computers, smart phones, tablets, etc. These evaluations are entitled as user experience in aesthetic, design and marketing literature. User experience can be defined in the

context of consumer behaviour as all features of usability and desirability of a product or web site (Lorenz, Pascual, Blankertz, & Vidaurre, 2014). User experience concept adapts a holistic view of the relationship between humans and systems (Hassenzahl, Platz, Burmester, & Lehner, 2000; Hassenzahl, 2001). Paredes and Hernandez (2017) state that besides the interaction between user and system, context is another important determinant for user experience.

User experience quality is a crucial indicator for e-retailers. Online purchasing behaviour, repurchase intention and recommending website to others can be affected by user experience quality. Therefore, firms can gain a competitive advantage by designing user experience (Paredes & Hernandez, 2017). On the other hand, digital literacy lead users have an expectancy that can be summarized as getting high satisfaction from their interaction with system, web site or interface (Schrepp, Cota, Gonçalves, Hinderks, & Thomaschewski, 2017) and this expectancy is reflected by firms as an obligation for designing web sites strategically (Paredes & Hernandez, 2017).

User experience is related to functional design (Alkadeem, 2012) and psychological design (Norman, 1990). The functional aspect refers to efficiency, learnability, memorability, satisfaction, and effectiveness and psychological aspect of design is related to emotions. In this vein, it can be said that user experience has a key role in proposing superior value to consumers and understanding online consumer behaviours.

#### **2.4. Online Purchase Intention**

Consumers' desire to make purchases by contacting web retailers online is defined as the intention to buy online (Pavlou, 2003). In order for online sellers to maintain their competitive advantage in their current position, it is vital that they encourage customers to purchase behavior and reduce risks. In addition, efforts to increase online purchasing intention can help web retailers improve their existing marketing and customer relationships (Van der Heijden, Verhagen, & Creemers, 2003). Consumers are required to use technology during online shopping while communicating with sales consultants in traditional purchases. It is important that the website used in this context is understandable, easy and reliable by consumers. In addition, factors such as the impact of the brand on the consumer and the previous shopping experience with the same website have a positive effect on the buying intention (Blackwell, Miniard, & Engel, 2001). Hong and Cha (2013) stated that financial performance and psychological risks have a negative impact on consumers' buying intentions in their research on the subject.

### **3. Hypothesis Development**

Positive and negative e-wom can provide information about perceived quality for customers in online shopping. In addition to this, negative e-wom increases consumers' perceived risk level toward online shopping (Lee, Rodgers, & Kim, 2009). Lin, Jones, and Westwood (2009) stated that online consumer reviews are more important for consumers in purchasing process when the perceived risk level is considered high. Another approach to the relationship between online consumer reviews and perceived risk is that perceived risk could be decreased by giving importance to online consumer reviews (Zhu & Zhang, 2010). In this context  $H_1$  has been proposed;

**H<sub>1</sub>:** Usefulness of online consumer reviews has an effect on perceived risk toward online shopping.

In recent years, a considerable increase in the number of studies on online consumer reviews has been observed. Various studies showed that negative consumer reviews affect purchase intention (East, Hammond, & Lomax, 2008; Vázquez-Casielles, Suárez-Álvarez, & Del Rio-Lanza, 2013). Pavlou (2003) suggested that the level of perceived risk (high or low) is an important determinant for purchasing in online channels. Similarly, perceived risk toward online shopping leads to repurchase behaviors of consumers. According to Hsin Chang, and Wen Chen (2008), if the perceived risk can be decreased, consumers will have more tendency to purchase online. In this context H<sub>2</sub> has been proposed;

**H<sub>2</sub>:** Perceived risk toward online shopping has an effect on online purchase intention.

Thorelli, Lim, and Ye (1988) stated that perceived risk is a significant determinant for explaining consumers' purchase intention. In this vein, previous researches revealed that perceived risk in online shopping affects consumer online purchase behaviour and intention (Hsin Chang & Wen Chen 2008; Gefen, 2002; Kim, Kim, & Leong, 2005; Pavlou, 2003; Sweeney, Soutar, & Johnson, 1999). However, it can be said that various variables may have a mediating effect on this direct relationship. If an evaluation is made based on user experience, according to Shukla et al., (2010) website satisfaction mediates consumers' purchase intention and ease of use, perceived usefulness, information and joyful aspects of website are the two of the important determinant of online satisfaction. On the other hand, interface quality (Park & Kim, 2003), readability and accessibility (Bauer, Grether, & Leach, 2002) are remarkable antecedents for user commitment. Davis, Bagozzi, and Warshaw (1989) implied that easily navigated websites impact website usage level and satisfaction. Finally, it is clear there is a positive relationship between repurchase intention and customer satisfaction (Patterson & Spreng, 1997). Considering the above information it can be said that user experience has an important role in the relationship between perceived risk and online purchase intention. In this context H<sub>3</sub> has been proposed;

**H<sub>3</sub>:** User experience mediates the effect of perceived risk on online purchase intention.

## **4. Research Method**

The present study aims to investigate the effect of perceived usefulness of consumer reviews on perceived risk toward online shopping and online purchase intention. On the other hand, the authors aim to investigate the mediating effect of user experience on the relationship between perceived usefulness of consumer reviews and perceived risk toward online shopping.

### **4.1. Sample and Data Collection**

The focal point of this study is single-purchase items. Single-purchase items considered as experience goods (Nelson, 1970) and books, movies, video games, music, etc. are some examples of this product type. The main feature of these items is that it is difficult to observe product characteristics before consuming them. In this vein, online consumer reviews can be helpful for avoiding or decreasing purchasing risk when making a purchasing decision on this type of products (Zhu & Zhang, 2010). The population of the study consists of individuals who purchase single-purchase items at least once in

Istanbul. An online survey was designed and shared on different social media platforms such as Facebook, Twitter, and Instagram in order to collect data. 463 individuals participated in the survey, however, only 345 of them state that they have purchased single-purchase items via online channels. Therefore, the sample size of the research was constituted by 345 surveys and the data was collected between the 6<sup>th</sup> of March and 27<sup>th</sup> of March 2019.

#### 4.2. Research Design

For the purposes of the study, a comprehensive literature review was performed and the most proper scales were tried to be chosen for collecting data. In this direction, 4 items scale for perceived usefulness of online consumer reviews adapted from Davis, Bagozzi, and Warshaw (1989); the scale for perceived risk toward online shopping was contained 16 items was adapted from Forsythe, Liu, Shannon, and Gardner (2006); 8 items user experience scale was adapted from Schrepp, Hinderks, and Thomaschewski (2017); and finally 3 items online purchase intention scale was adapted from Chen and Barnes (2007).

The online questionnaire included 38 questions and 2 parts. Firstly, the participants were asked whether they bought a single-purchase item before. The participants who answered “yes” to this question were able to see other parts of the survey. The second part of the questionnaire was constituted by 31 questions and 23 of these questions were measured using 7-point Likert scale (1: Strongly Disagree; 7: Strongly Agree) and 8 questions (user experience scale) were measured via semantic differential scale. Finally, the third part of the survey was designed for gathering demographic data about participants.

### 5. Findings

Firstly, the demographic characteristics of the participants were revealed. Demographic findings reveal that 60,6% of participants are female, 65,8% of participants are single, 32,5% of participants are 25 and 30 years old, 31,6% of participants earn 2020 TL and less in a month, 51,9% of participants have a bachelor degree, 45,5% of participants are employed at private sector and finally 34,8% of participants use online channels to purchase products 11 times and more per a year.

Table 1 shows the mean and standard deviation values of items and Cronbach’s alpha values of the variables. The item “Online consumer reviews are useful to me.” (4,49) has the highest mean in the usefulness of online consumer reviews scale and the item “Online consumer reviews make me a smarter shopper.” (5,28) has the lowest mean. The item “May purchase something by accident.” (2,99) has the lowest mean in perceived risk scale and the item “Inability to touch and feel the item.” (5,60) has the highest mean.

**Table 01.** Mean, Standard Deviation and Cronbach's Alpha Values of Variables of All Scales

Scale	Code	Item	Mean	SD	$\alpha$	Scale	Code	SEM Code	Item	Mean	SD	$\alpha$
Usefulness of Online Consumer Reviews	CR1	Online consumer reviews are useful to me.	5,49	1,578	0,930	Perceived Risk	PR1	FIN1	Can't trust the online company	3,61	1,610	0,879
	CR2	Online consumer reviews make purchasing easier.	5,40	1,587			PR2	FIN2	May not get the product	3,69	1,707	
	CR3	Online consumer reviews make me a smarter shopper.	5,28	1,545			PR3	FIN3	May purchase something by accident	2,99	1,833	

User Experience	CR4	Online consumer reviews are very beneficial to me.	5,38	1,530	0,830	PR4	FIN4	My personal information may not be kept	4,51	1,726
	UX1	Obstructive – Supportive	5,48	1,385		PR5	FIN5	I may not get what I want	4,57	1,707
	UX2	Complicated – Easy	5,23	1,454		PR6	FIN6	My credit card number may not be secure	4,59	1,696
	UX3	Inefficient – Efficient	5,53	1,387		PR7	FIN7	Might be overcharged	3,68	1,860
	UX4	Confusing – Clear	5,17	1,578		PR8	PRO1	Can't examine the actual product	5,32	1,733
	UX5	Boring – Exiting	5,07	1,351		PR9	PRO2	Physical attributes may be a problem with	4,97	1,590
	UX6	Not Interesting – Interesting	4,65	1,591		PR10	PRO3	Can't try products on online	5,53	1,644
	UX7	Conventional – Inventive	4,97	1,549		PR11	PRO4	Inability to touch and feel the item	5,60	1,666
Online Purchase Intention	UX8	Usual – Leading Edge	4,14	1,584	0,921	PR12	PRO5	Must pay for shipping and handling	5,12	1,693
	OP1	Given the chance, I intend to use this retailer's web site.	5,14	1,602		PR13	PRO6	Must wait for merchandise to be delivered	5,43	1,607
	OP2	It is likely that I will transact with this web retailer in the near future.	5,03	1,700		PR14	CON1	Too complicated to place order	3,16	1,853
	OP3	Given the chance, I predict that I should use this retailer's web site in the future.	5,18	1,663		PR15	CON2	Difficult to find appropriate websites	3,47	1,929
					PR16	CON3	Pictures take too long to come up	3,49	1,855	

The item “Inefficient – Efficient” (5,53) has the highest mean in user experience scale and the item “Usual – Leading Edge” (4,14) has the lowest mean. Finally, the highest mean was acquired by “Given the chance, I predict that I should use this retailer’s web site in the future.” (5,18) in online purchase intention scale and the lowest mean was acquired by “It is likely that I will transact with this web retailer in the near future.” (5,03).

In order to reveal sub dimensions of the scales, exploratory factor analysis was performed. Kaiser-Mayer-Olkin values were 0,929, 0,878 and 0,914 and Bartlett Test significant level was 0,000 so that the sample was both adequate and sufficient for the factor analysis (see Table 2).

**Table 02.** Results of Exploratory Factor Analysis

		Usefulness of Consumer Reviews	Perceived Risk	User Experience	Online Purchase Intention
<b>KMO</b>		0,858	0,877	0,858	0,760
<b>Bartlett's</b>	<b>Chi-Square</b>	1119,947	2750,865	1010,327	770,483
	<b>df</b>	6	120	28	3
	<b>Sig.</b>	0,000	0,000	0,000	0,000

According to the results of exploratory factor analyses, the usefulness of consumer reviews and online purchase intention scales were singled out in one factor group. On the other hand, PR3 and PR9 items in perceived risk scale were moved from analyses because PR3 item had a lower value (0,483) than 0,50 and PR9 item was nearest values (0,587 – 0,573) at Rotated Component Matrix. After these processes exploratory factor analysis re-conducted for perceived risk scale. The results revealed that perceived risk scale had three sub dimensions. These dimensions entitled as Financial Risk (PR1, PR2, PR4, PR5, PR6, PR7), Product Risk (PR8, PR10, PR11, PR12, PR13,), Convenience Risk (PR14, PR15, PR16). The other multidimensional scale is user experience and exploratory factor analysis revealed that UX1, UX2, UX3, and UX4 constituted first dimension (Ease of Use Experience) of user experience; UX5, UX6, UX7, UX8 constituted second dimension (Feeling of Use Experience) of user experience. The items of perceived risk scale were renamed after exploratory factor analysis for the structural equation model (see Table 1 SEM Code Column). Reliability of new sub dimensions were calculated as follows; Financial Risk (0,849), Product Risk (0,833), Convenience Risk (0,792), Ease of Use Experience (0,843), Feeling of Use Experience (0,732). The research model and hypotheses were revised according to the result of factor analyses (see Figure 1);

**H1a:** Usefulness of online consumer reviews has an effect on financial risk toward online shopping.

**H1b:** Usefulness of online consumer reviews has an effect on product risk toward online shopping.

**H1c:** Usefulness of online consumer reviews has an effect on convenience risk toward online shopping.

**H2a:** Financial risk toward online shopping has an effect on online purchase intention.

**H2b:** Product risk toward online shopping has an effect on online purchase intention.

**H2c:** Convenience risk toward online shopping has an effect on online purchase intention.

**H3a:** Ease of user experience mediates the effect of financial risk on online purchase intention.

**H3b:** Ease of user experience mediates the effect of product risk on online purchase intention.

**H3c:** Ease of user experience mediates the effect of convenience risk on online purchase intention.

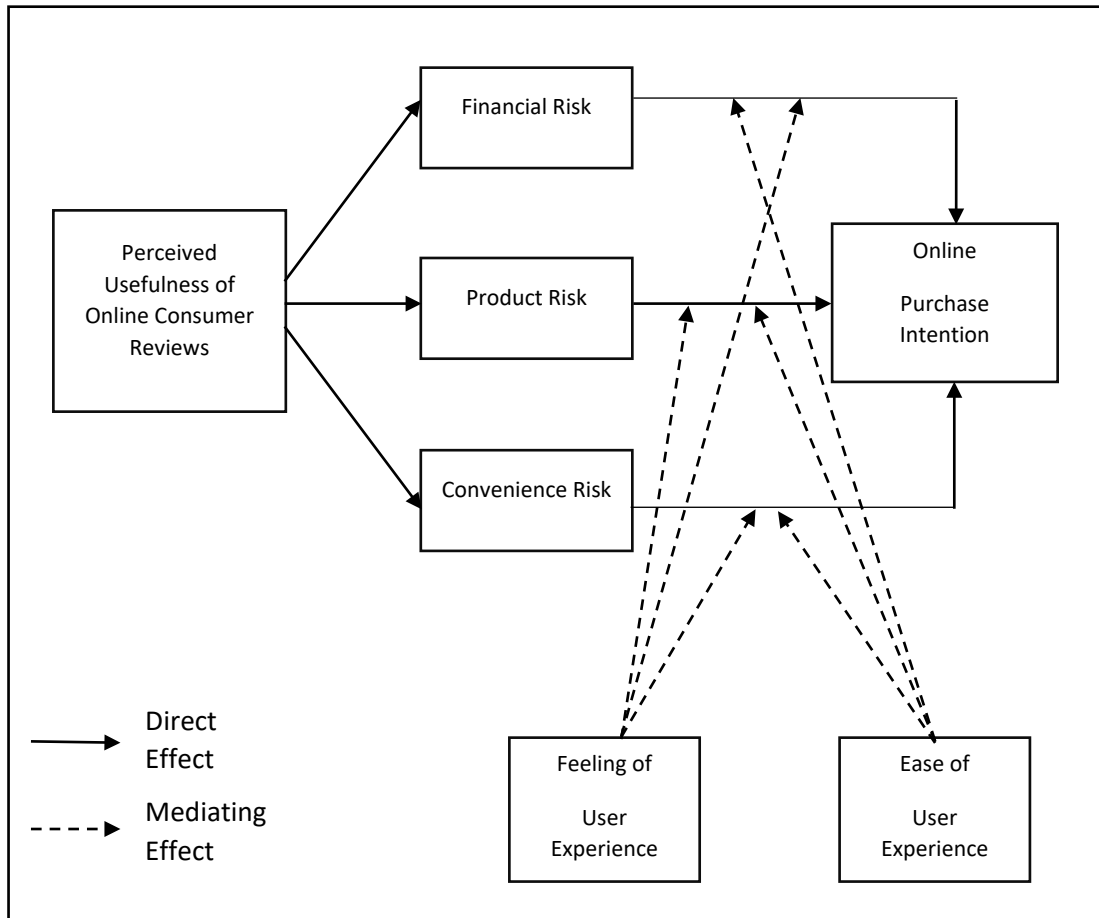
**H3d:** Feelings of user experience mediates the effect of financial risk on online purchase intention.

**H3e:** Feelings of user experience mediates the effect of product risk on online purchase intention.

**H3f:** Feelings of user experience mediates the effect of convenience risk on online purchase intention.

Confirmatory factor analyses were performed after the exploratory factor analysis in order to determine the validity of the scales by using the AMOS 25. Scale fit indices were stated in Table 3. In order to acquire the required scale fit indices some modifications performed. These processes listed below.





**Figure 01.** Revised Research Model

In order to obtain the required scale fit indices PR1 was moved and between PR2 and PR7 items covariance correlation was established; between PR12 and PR13 items covariance correlation was established; between UX1 and UX3 items covariance correlation was established and finally, covariance correlation was established between UX5 and UX8 items. On the other hand, reliability (CR) and AVE values of scales show that CR values are higher than 0,70 and AVE values (except Feeling of Use Experience) are higher than 0,50. These findings state that the scales are valid and reliable (Hair, Black, Babin, & Anderson 2010). Hypothesis tests were conducted via structural equation models.

**Table 03.** Scale Fit Indices

	X <sup>2</sup>	Df	X <sup>2</sup> /df	GFI	CFI	RMSEA	CR*	AVE
Per. Usefulness of Online Cons. Rev.	2,912	2	1,456	0,996	0,999	0,036	0,931	0,771
Financial Risk	7,558	4	1,889	0,991	0,995	0,051	0,833	0,509
Product Risk	5,905	4	1,476	0,993	0,998	0,037	0,834	0,519
Convenience Risk	0,892	1	0,892	0,998	1	0,000	0,797	0,569
Ease of User Experience	0,082	1	0,082	1	1	0,000	0,837	0,564
Feeling of Use Experience	0,962	1	0,962	0,999	1	0,000	0,757	0,441
Online Purchase Intention	0,028	1	0,028	1	1	0,000	0,799	0,931
Good Model Fit Indices			≤3	≥0,90	≥0,97	≤0,05		
Acceptable Model Fit Indices			≤4-5	0,89-0,85	≥0,95	0,06-0,08		

p>.05, X<sup>2</sup> =Chi-Square; df=Degree of Freedom; GFI=Goodness Of Fit Index; CFI=Comparative Fit Index; RMSEA=Root Mean Square Error of Approximation Source: Cem Meydan & Harun Şeşen (2011). Yapısal Eşitlik Modellemesi AMOS Uygulamaları. Detay Yayıncılık.\*Composite Reliability

Table 4 includes the model fit indices for the first structural equation model. In order to acquire the required model fit values covariance correlation established between error terms e10 and e20; between e10 and e16. The model fit indices are within the required values so it can be said that the model is structurally valid.

**Table 04.** Model Fit Indices for First Structural Equation Model

	X <sup>2</sup>	df	X <sup>2</sup> /df	GFI	CFI	RMSEA
Model Fit Indices	455,165	162	2,810	0,892	0,930	0,073
Good Model Fit Indices			≤3	≥0,90	≥0,97	≤0,05
Acceptable Model Fit Indices			≤4-5	0,89-0,85	≥0,95	0,06-0,08

The standardized  $\beta$  coefficients, standard error, critical ratio, p and R2 statistics of the model in question are shown in Table 5. The findings reveal that the perceived usefulness of online consumer reviews has an effect on product risk ( $\beta=0,342$ ;  $p<0,05$ ) and convenience risk ( $\beta= -0,213$ ;  $p<0,05$ ) . Another finding is that product risk ( $\beta=0,206$ ;  $p<0,05$ ) and convenience risk ( $\beta= -0,283$ ;  $p<0,05$ ) have effect on online purchase intention. It can be said that H<sub>1c</sub> and H<sub>2c</sub> are supported; H<sub>1a</sub>, H<sub>1b</sub>, H<sub>2a</sub>, and H<sub>2b</sub> are not supported.

**Table 05.** The Coefficients for First Structural Equation Model

Variables	Std. $\beta$	Std. Error	CR*	P	R <sup>2</sup>
Consumer Reviews – Financial Risk	0,044	0,039	0,729	0,446	FR 0,02
Consumer Reviews – Product Risk	0,342	0,051	5,732	***	PR 0,117
Consumer Reviews – Convenience Risk	-0,213	0,066	-3,501	***	CR 0,045
Financial Risk – Online Purchase Intention	-0,104	0,132	-1,269	0,204	OPI 0,142
Product Risk – Online Purchase Intention	0,206	0,091	2,798	0,050	
Convenience Risk – Online Purchase Intention	-0,283	0,068	-4,009	***	

\*CR: Critical Ratio

In order to investigate the mediating effect of user experience on the relationship between perceived usefulness of consumer reviews and perceived risk, three conditions' existence were investigated. Baron and Kenny (1986) listed these requirements as below;

1. Independent variables (Perceived Risk Dimensions) must effect dependent variable (Online Purchase Intention) see Table 5,
2. Independent variables (Perceived Risk Dimensions) must effect mediator variable (User Experience Dimensions),
3. Mediator variable (User Experience Dimensions) must effect dependent variable (Online Purchase Intention).

In this context, the mediating effect of user experience investigated only for the relationship between product risk and online purchase intention, the relationship between convenience risk and online purchase intention. Because of the insignificant effect of financial risk on online purchase intention, the mediating effect of user experience on this relation could not be revealed. The structural model for condition 2 and 3 can be seen in Figure 2. Model fit indices for Figure 2 are shown in Table 6.

**Table 06.** Model Fit Indices for Second Structural Equation Model

	X <sup>2</sup>	df	X <sup>2</sup> /df	GFI	CFI	RMSEA
Model Fit Indices	728,854	331	2,202	0,873	0,926	0,059
Good Model Fit Indices			≤3	≥0,90	≥0,97	≤0,05
Acceptable Model Fit Indices			≤4-5	0,89-0,85	≥0,95	0,06-0,08

The standardized  $\beta$  coefficients, standard error, critical ratio, p and R2 statistics of the model in question are shown in Table 7. The findings reveal that financial risk has effect on ease of use experience ( $\beta = -0,178$ ;  $p < 0,05$ ) and feeling of use experience ( $\beta = -0,305$ ;  $p < 0,05$ ); product risk has effect on ease of use experiences ( $\beta = 0,302$ ;  $p < 0,05$ ) and feeling of use experience ( $\beta = 0,184$ ;  $p < 0,05$ ); convenience risk has effect on ease of use experience ( $\beta = 0,099$ ;  $p > 0,05$ ) and does not have significant effect on feeling of use experience ( $\beta = 0,302$ ;  $p < 0,05$ ). Another ease of use experience ( $\beta = 0,314$ ;  $p < 0,05$ ) and feeling of use experience ( $\beta = 0,223$ ;  $p < 0,05$ ) has effect on online purchase intention.

**Table 07.** The Coefficients of Structural Equation Model for Mediating Effect (Second SEM)

Variables	Std. $\beta$	Std. Error	CR*	p	R <sup>2</sup>	
Consumer Reviews – Financial Risk	0,039	0,039	0,602	0,547	CR	0,045
Consumer Reviews – Product Risk	0,346	0,051	5,806	***		
Consumer Reviews – Convenience Risk	-0,211	0,066	-3,479	***	PR	0,120
Financial Risk - Ease of Use Experience	-0,178	0,103	-2,062	0,039		
Financial Risk - Feeling of Use Experience	-0,305	0,094	-3,049	0,002	FR	0,001
Product Risk - Ease of Use Experience	0,302	0,072	3,822	***		
Product Risk - Feeling of Use Experience	0,184	0,061	2,180	0,029	FUX	0,055
Convenience Risk - Ease of Use Experience	-0,245	0,053	-3,308	***		
Convenience Risk - Feeling of Use Experience	0,099	0,045	1,248	0,212	EUX	0,172
Financial Risk – Online Purchase Intention	0,017	0,122	0,219	0,827		
Product Risk – Online Purchase Intention	0,072	0,084	1,059	0,289	OPI	0,356
Convenience Risk – Online Purchase Intention	-0,226	0,070	-3,126	0,002		
Ease of Use Experience - Online Purchase Intention	0,314	0,130	3,262	0,001		
Feeling of Use Experience - Online Purchase Intention	0,223	0,160	2,395	0,017		

FR: Financial Risk; PR: Product Risk; CR: Convenience Risk; EUX; Ease of User Experience; FUX: Feelings of User Experience; OPI: Online Purchase Intention

These findings indicate that the mediating role of user experience on the relationship between product risk and online purchase intention, convenience risk, and online purchase intention can be investigated. According to the findings, it can be said that partial mediating effects of user experience dimensions' on product risk and convenience risk were observed. It can be said that for the mediating effect of user experience only H<sub>3c</sub> is supported.

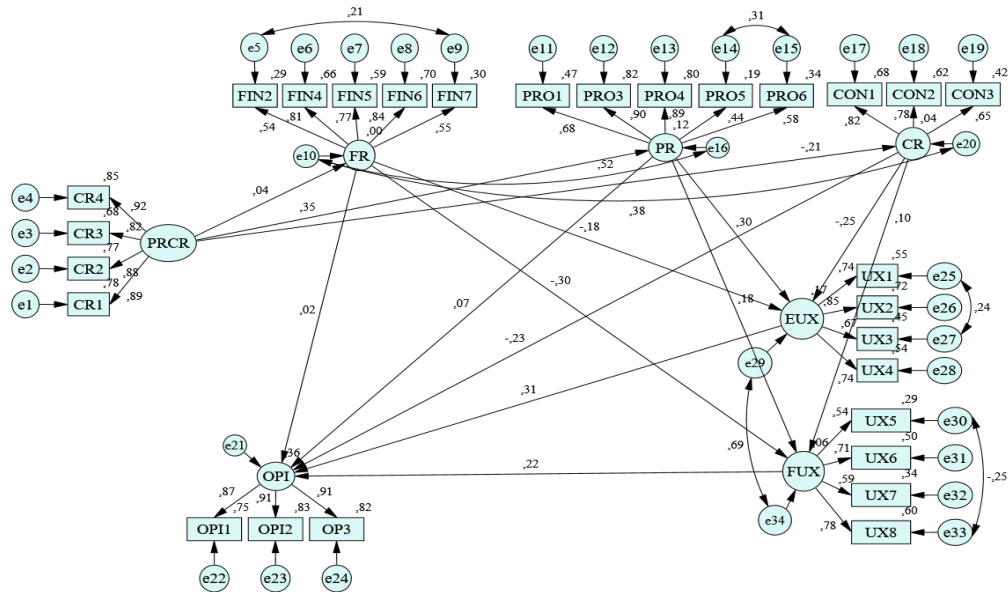


Figure 01. Second Structural Equation Model

## 6. Conclusion and Discussions

The usage of the internet by consumers in order to obtain information and share experiences about products and services enable usage of online platforms for supporting their purchase decision. During online purchase, process consumers are exposed to some kind of risks and these risk types can be considered as key determinants of purchase intention. For decreasing perceived risks toward online shopping, consumers use online consumer reviews and get information about products or services. Moreover, decreasing perceived risk with the help of consumer reviews is inadequate for making purchase decisions. Online retailers can help consumers to make an easier purchase online via providing unique user experience. In this vein, it can be said that designing a web site that is in accordance with consumers' needs and expectations leads them to be more inclined to online purchasing. Starting from these arguments, the present study aims to investigate the effect of perceived usefulness of consumer reviews on perceived risk and the mediating effect of user experience on the relationship between perceived risk and online purchase intention.

The findings imply that consumer reviews do not affect financial risk, however positively affect product risk and convenience risk. These findings suggest that consumers' usage of online reviews does not decrease the level of perceived product and convenience risks. Moreover, while purchasing single-purchase items, consumer reviews increase the level of perceived product risk and decrease the level of perceived convenience risk. These situations may stem from the nature of single-purchase items. The price of single-purchase items are almost standard in every online retailer. That is why consumer reviews do not have an effect on financial risk toward single-purchase items. However increase in the level of the perceived risk of product can be interpreted as negative reviews on single-purchase items lead consumers to perceive more risk about product. On the other hand, the usefulness of consumer reviews decreases the level of perceived convenience risk. It can be said that consumer reviews help consumers find appropriate websites, and complete order. When the effect of perceived risk dimensions on online purchase intention

is considered, it is concluded that financial risk and product risk do not affect online purchase intention neither positively nor negatively. The examination on the relationship between convenience risk and online purchase intention revealed that convenience risk negatively affects consumers' online purchase intentions. If consumers cannot complete orders easily, they find appropriate websites and web sites have lower level visual efficacy, consumers show less tendency for purchasing online.

Two dimensions of user experience has emerged in this study and they are entitled as “ease of user experience” and “feelings of user experience”. In the context of user experience, findings reveal that ease of user experience affects financial and convenience risks negatively and product risk positively. It can be said that if consumers perceive web site as easily accessible, not confusing, trustworthy, etc., their financial and convenience risk perceptions are reduced. However, product risk increases with the impact of ease of user experience. Reaching easily to web site is a positive factor for consumers but reaching easily does not mean finding enough and correct information about products. It can be said that if consumers reach easily to web sites with inadequate information, perceived risk toward product may be increased. The results show that feelings of user experience have a negative effect on financial risk, positive risk on product risk and no effect on convenience risk. The interpretation of these findings is that web sites that address consumers' feelings help consumers develop a positive attitude and reduce perceived risk. Similarly, with the relationship between ease of use experience and perceived product risk, feelings of user experience increase product risk. It can be said that web sites that are usual, conventional and boring, and do not entertain the consumers increase the product risk. Finally, ease of user experience and feelings of user experience effect online purchase intention positively. When all these findings are evaluated together, that is possible to say user experience has an important role in navigating risk perceptions of consumers and online purchase intention. The emergence of the two dimensions of user experience is another important finding. Online retailers should pay attention when they design their websites.

The examinations for the mediating role of user experience on the relationship between perceived risk and online purchase intention has revealed that ease of user experience decreases the effect of convenience risk on online purchase intention. In other words, when consumers perceive convenience risk toward online shopping, if they are satisfied with the functionality of web site they tend to reduce convenience risk and shop online.

For managerial implications, it should be noted that firms should pay attention to consumer reviews on online platforms. Negative consumer reviews can provoke product risk and due to these reviews, consumers avoid purchasing online. Furthermore, consumer reviews lead individuals to perceive less convenience risk. These findings suggest that e-retailers should serve consumers in order to satisfy them and direct sharing their product evaluations on online platforms. To increase online purchase intention firms should design their website with the aim of reducing convenience risk. Moreover, in order to reduce the risk perception of online shopping and direct consumers to online shopping, emotional and functional aspects of user experience should be regarded while designing web sites.

Limitations of the present study can be listed as follows; the sample of the research consist of single-purchase item buyers, the authors reached the participants on social media for data collection. In this case, individuals who are not social media users but buy single-purchase items could not be included

in the sample of the study. Future research can focus on different product or service categories, different aspects of user experience or different business model on the online environment.

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