



DETERMINING FACTORS THAT AFFECT ONLINESHOPPING INTENTION IN BUSINESS TO CONSUMER (B2C) MARKETS IN TERMS OF CONSUMER TRUST

Gunel UMayeva

Istanbul Aydin University

Department of Business, Business Administration Program

ABSTRACT

Technological advances of today enable producers to carry out shopping operations with their consumers on a virtual platform. This so called e-commerce has countless benefits for both producers and consumers at the same time. E-commerce, which provides consumers with the opportunity of shopping for a constitutively reasonable price and saving of time, is increasing its popularity from day to day. Despite this, there are also certain obstacles for consumers regarding online purchasing. In the given study, factors that influence consumers' attitude on online purchasing have been examined within the context of confidence element. In addition to this, the effect of variables of website quality, safety/privacy, consumer reviews and website reputation on the attitude of online purchasing in the context of consumer confidence have been studied.

The findings of the study reveal that all the variables that were examined in the working model affect the online purchasing attitude of consumers within the context of consumer confidence. This suggests the importance of businesses heading for e-commerce, building a quality and safe website, giving place to consumer reviews in the website and establishing a website basis that can protect consumers' personal and credit card information while shopping online in order to eliminate the barriers that consumers can face when trading in a virtual environment.

KEYWORDS: E-commerce, B2C, consumer trust, privacy/security, website quality, online consumer review OCR, website reputation

1.Introduction

In the last ten years, ten times grown e-commerce provides limitless advantages and conveniences both to companies and consumers. Fast growing electronic commerce has brought huge benefits to societies and economy. [20]

According to recent researches, in 2015 from the total population of the world's 7,210 million people, 3,010 were the active Internet users. This number was around 360 million in 2010 and these numbers are growing in geometrical progression stimulated by the advancement of technology.

There are some disadvantages from the advantages offered by electronic commerce. As follows, this concept contains some sort of risks in it. For example, a possibility of seizure of the personal and credit card information by the third parties, penetration of the harmful software to personal computers and theft of their personal information and other harmful factors prevent people from doing shopping in e-commerce. [18]

Among all performed operations there are numerous important factors connecting the sellers and the customers. One of these important factors is the trust.[6]

An Online seller has to be well aware of the customer's desires, what kind of expectation do they have and what kind of situations strengthen or weaken the customer trust.[3]

2.Literature Review

The most influential tool of e-commerce is the Internet. The main reasons for this are the cost advantages it provides to the e-commerce parties and its easy and quick perception and adoption by the users.

There are some obstacles to do online shopping from the internet. Consumers have to upload their personal information and credit card data into the system after online shopping in order to complete their trading. However, most of the people do not feel good about sharing their personal information on the Internet. Because they do not trust sometimes.[1]

Trust factor is one of the most important elements in people's social, professional and private lives. It is also very important in e-commerce. E-trust is the name of trust when it is used in the digital environment rather than the physical environment. [17]

In our research we choose four factors that affect consumer trust in Business to Customer (B2C). These factors are Privacy/Security, Website Quality, Online Consumer Review, Website Reputation.

Privacy/Security- Some of the people are not aware of the risks that their personal and financial data can be misused by some vicious parties and can be sold to the third parties. [15] Unfortunately, today, the existence of the fake e-commerce websites which sell out customers personal and credit card information and fraud incidents related to this, have formed this kind of perception in people. [1]

Website Quality- In the e-commerce environment, one of the most important and leading to success factors for the companies is the websites decent design, user-friendliness and reliability. Content, Navigation, Design and Structure, Appearance and multimedia, Uniqueness are one of the important elements. [14]

Online Consumer Review- In OCR, prior experiences, recommendations and critical evaluations of the people who have purchased a product are being written. [12] Another name for OCR is the word-of-mouth (eWOM). Word-of-mouth, WOM, is one of the most important marketing strategies. Especially in the online environment.

Website Reputation- [8], argues that reputation is the most critical and important factor in creating online trust. [2] in their research have shown the three elements that bring high-quality relationships into the forefront. These are System Quality, Information Quality, Service Quality. These three elements play an important role in the establishment of high-quality service and mutual satisfaction.

3. Research Aim

The aim of the research is finding out the relationship between the variables of security, website quality, online customer reviews, web site reputation and online purchase intention in terms of trust as a mediating variable. In this research quantitative research methods are followed. Consequently, this research is a casual research trying to understand the relationship between the variables of security, website quality, online customer reviews, web site reputation and online purchase intention in terms of trust as a mediating variable.

In this research study, online questionnaire has been used to collect the data. The structured questionnaire provides the comprehensive insights to the researchers about the determinants and its factors which are affecting on the customer behavior. The questionnaire is designed in such a way that it covers the maximum aspects about security, website quality, online consumer reviews, website reputation, trust and online purchase intention.

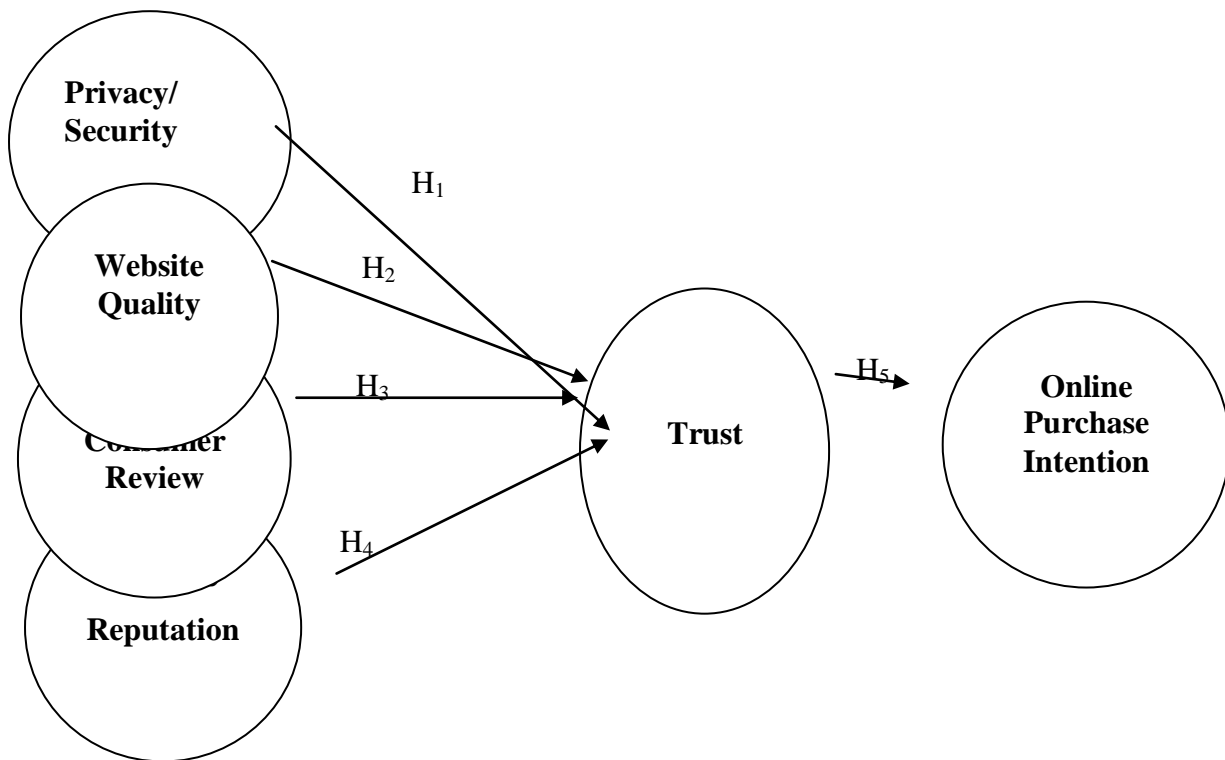
The total response received through the online questionnaire is 258 out of which 205 respondents are doing the online shopping whereas 53 respondents are those who are not doing the online shopping. Participants were completed 205 questioned survey with a five-point Likert scale (1= Strongly disagree, 2= disagree, 3= Neither agree nor disagree, 4= Agree, 5= Strongly agree / 1= Very bad, 2= bad 3= Neither good nor bad, 4= Good 5= Very good) in order to evaluate their attitudes on security, website quality, Online Consumer Review, Website Reputation, Trust and intention on online Shopping Behavior. All scales are examined in details at below in Table 3.1

Table3.1: Adoption of Questions

Variable	Question no.	Source
Security / Privacy	1 to 3	Wolfenbarger & Gilly (2003)
Website Quality	1 to 3	Aladwani and Palvia (2002) and Kim and Stoel (2004)
Online Consumer Review	1 to 3	Raffaele Filieri (2015)
Website Reputation	1 to 3	Sabine Einwiller (2003)
Trust	1 to 4	Brown and Jayakody (2008)
Online Purchase Intention	1 to 3	Chiu et al, (2014)

3.2 Hypothesis and Model of Research

On the basis of theoretical and empirical studies which are discussed and presented in the literature review chapter, the study draws the conceptual framework model for this research:



The hypotheses emerging from the literature and the model of the study are presented at below.

H₁: Security has an effect on online shopping intention in terms of mediating effect of trust.

H₂: Website quality has an effect on online shopping intention in terms of mediating effect of trust.

H₃: Online consumer reviews (OCR) has an effect on online shopping intention in terms of mediating effect of trust.

H₄: Web Site Reputation has an effect on online shopping intention in terms of mediating effect of trust.

H₅: Trust has an effect on online shopping intention.

4. ANALYSIS

IBM SPSS 25.0 (Statistical Package for the Social Sciences) program was used for the analyses of the primary data collected. In order to analyses mediation effect the program of Hayes process was conducted. With demographic data, descriptive statistical analysis was conducted. Additionally, reliability analysis and mediation analysis (regression) were conducted to test the research model respectively.

Table 4.1: Demographic Features of Respondents

Group (n=205)	Variables	Frequency	Percent	Cumulative Percent
Gender	Male	139	67.8	67.8
	Female	66	32.2	100.0
Marital Status	Single	171	83.4	83.4
	Married	34	16.6	100.0
Age	18-25 Years	64	31.2	31.2
	26–33 Years	116	56.6	87.8
	34–41 Years	20	9.8	97.6
	50 and Greater	5	2.4	100.0
	3.000 and less	90	43.9	43.9
Monthly Income (TL)	3.001 – 5.000	59	28.8	72.7
	5.001 – 8.000	19	9.3	82.0
	8.001 – 10.000	8	3.9	85.9
	10.001 – 15.000	20	9.8	95.6
	15.001 and more	9	4.4	100.0

The demographic features of the respondents are divided into gender, marital status, age, monthly income, educational level and profession. The gender distribution has two group with the codification of 1 and 2 where 1 indicates the male respondents and 2 indicates that female respondents. The gender distribution shows that there are 139 respondents who are male with the percentage of 67.8% whereas 66 respondents are female with the percentage of 32.2%. Marital status coded with the values of 1 and 2 where 1 indicates the single status and 2 indicates the married status. The marital status shows that respondents who participated in the research include 171 singles with the 83.4 percent and married respondents are 34 with 16.6%. The ratio scale is used to collect the data about the respondents age. The age is coded into five group. The five age groups include 18-25 Years, 26–33 Years, 34–41 Years, 50 and Greater with the code of 1, 2, 3, 4 and 5 respectively. When the distribution is examined with the help of age factor, it can be clearly seen that majority of the respondents are between the age of 26–33 Years with 56.6 percent. After that, 18-25 Years having a frequency of 64 with the 31.2 percent, 34–41 Years with the frequency of 20 and 9.8 percent. However, the least proportion pertain to the 50 and Greater with the frequency of 5 and 2.4 percent.

The table4 shows the monthly income distribution of each respondents and these income distributions is divided into two groups. Income distribution of 3.000 YTL and less is assigned code 1, 3.001 TL – 5.000 TL assigned 2, 5.001 TL – 8.000 TL assigned 3, 8.001 TL – 10.000 TL assigned 4, 10.001 TL – 15.000 TL assigned 5, 15.001 TL and more assigned 6. The result revealed that most of the respondents have an income less than from 3000 TL with the frequency of 90 and having 43.9 percent. The second group accounts between 3001 TL and 5000 TL with the frequency of 59 having 28.8 percent. However, the least frequency is 8 for the segment of 8001TL to 10000TL with 3.9 percent. Education level is categories into four groups where 1 indicates the primary school which has a frequency of 4 with only 2 percent, secondary school is assigned 2 with the frequency of 9 and 4.4 percent contribution, bachelor group is nominated with the code of 3 having a frequency of 59 with 28.8 percent and graduate has highest contribution with the frequency of 133 and 64.9 percent. The table shows that majority of the respondents are those who belong to graduate group with the 64.9 percent, then bachelor respondents come with the percent of 28.8 percent, after that secondary school and least contribution is made by primary school respondents. However, most of the respondents who do the online shopping belong to graduate class. The professions of the respondents where the profession is categorized into 14 groups and relevant codes are assigned to each of them. The results show that more of the respondents are students with the frequency of 49 and having 23.9 percent, after that respondents from the private sectors responded the questionnaire with the frequency of 37 and 18 percent. However, the least respondents belong to doctor professional having a frequency of 5 with 2.4 percent.

Table 4.2: Reliability Analysis

Variable	Scale item	Cronbach Alfa (α)
Security / Privacy	3	0,867
Website Quality	3	0,875
Online Consumer Review	3	0,906
Website Reputation	3	0,893
Trust	4	0,922
Online Purchase Intention	3	0,925

To test reliability of each construct reliability analysis was conducted and Cronbach Alpha values of each construct are presented in Table 3.6. Due to all of them are above 0,70 all constructs were found reliable.

4.3 Hypothesis Tests

Mediation Analysis is a statistical method used to evidence from studies designed to test hypothesis about how some casual antecedents variable X transmits its effects on o consequent variable Y. The basic mediation model consists of 3 pathways. These pathways are found by tracing ways one can get from firstly X to Y (called direct effect), secondly X to Y through M (called indirect effect) and lastly X to M. Indirect effect represents how Y is influenced by X through a casual sequence in which X influences M, which in turn influence Y(8)

All the tables include list of variables, indicating which is considered as a dependent variable (Y), Which an independent variable (X) and a mediator variable (M). Then a series of regression model are fitted, first predicting the mediator variable using the independent variable (Step 2), then the dependent variable using both the independent variable and the mediator (Step 3-4) and finally the dependent variable using the independent variable (Step 1).

H₁: Security has an effect on online shopping behavior in terms of mediating effect of trust.

Table4.3: Model Coefficients for the Security- Trust- Online Purchase Intention

Antecedent	Consequent							
	M (Trust)			Y (Online Purchase Intention)			c	
	Coeff	SE	P	Coeff	SE	p		
X (Security)	a	1,191	0,0592	0.000	^c _i	0,356	0,075	0.000
M (Trust)					ⁱ _b	0,389	0,051	0.000
Constant	ⁱ _M	1,6829	0,5974	0,005	ⁱ _Y	1,0227	0,446	0,022
		$R^2 = 0,666$				$R^2 = 0,672$		
		$F(1,203) = .405,0693, p < 0,000$				$F(2,202) = .207,3926, p < 0,000$		

The first model of the study includes the variables of security (as a X variable), Trust (as a M variable) and online purchase intention (as a dependent variable). In this case, while security was significant for trust and online purchase behavior, it is also significant in the presence of the mediator variable (trust); confirming the partial mediator effect. In this case total effect size was 0,8204 with a 95% confidence interval which did not include zero; that is to say the

effect was significantly greater than zero at 0.05. (Related “BootLLCI and BootULCI outputs were listed at the back of the study respectively as an SPSS output).

In Step 1 of the mediation model, the regression of security with online purchase intention, ignoring the mediator, was significant, $\beta=0,82$, $t(203)$, $p=0.000$. Step 2 showed that the regression of security and trust was also significant, $\beta=1,191$, $t(203)$, $p=0.000$. Step 3 and 4 of the mediation process showed that the mediator (trust) was significant $\beta=0,356$, $t(202)$, $p=0.000$ and it has a partial mediator effect on the total model.

H₂: Website quality has an effect on online shopping behavior in terms of mediating effect of trust.

Table4.4: Model Coefficients for the Website Quality- Trust- Online Purchase Intention

Antecedent	Consequent							
	M (Trust)			Y (Online Purchase Intention)			c	
	Coeff	SE	p	Coeff	SE	P		
X (Website Quality)	a	1,1687	0,0613	0,000	c	0,783	0,051	0,000
M (Trust)					i	0,265	0,074	0,000
	i				b	0,443	0,05	0,000
Constant	M	1,9369	0,6173	0,002	i	1,2086	0,457	0,000
		$R^2=0,6415$				$R^2=0,6578$		
		$F(1,203)=. 363,2640, p < 0,000$				$F(2,202)=. 194,1205, p < 0,000$		

The second model of the study includes the variables of website quality (as a X variable), Trust (as a M variable) and online purchase intention (as a dependent variable). In this case, while website quality was significant for trust and online purchase behavior, it is also significant in the presence of the mediator variable (trust); confirming the partial mediator effect. In this case total effect size was 0,7830 with a 95% confidence interval which did not include zero; that is to say the effect was significantly greater than zero at 0.05. (Related “BootLLCI and BootULCI outputs were listed at the back of the study respectively as an SPSS output).

In Step 1 of the mediation model, the regression of website quality with online purchase intention, ignoring the mediator, was significant, $\beta=0,783$, $t(203)$, $p=0.000$. Step 2 showed that the regression of website quality and trust was also significant, $\beta=1,1687$, t

(203), $p=0.000$. Step 3 and 4 of the mediation process showed that the mediator (trust) was significant $\beta=0,265$, $t(202)$, $p=0.000$ and it has a partial mediator effect on the total model.

H₃: Online consumer reviews (OCR) has an effect on online shopping intention in terms of mediating effect of trust.

Table 4.6: Model Coefficients for the Online Consumer Review- Trust- Online Purchase Intention

Antecedent	Consequent							
	M (Trust)			Y (Online Purchase Intention)				
	Coeff	SE	p	Coeff	SE	p		
				c	0,541	0,052	0.000	
X (Online Consumer Review)	a	0,8155	0,066	0.000	c ¹	0,107	0,051	0,037
M (Trust)				b	0,532	0,041	0.000	
	i							
Constant	M	5,6683	0,6504	0.000	i _Y	1,5998	0,4456	0.000
		$R^2=0,4289$				$R^2=0,6438$		
		$F(1,203)=152,4728$				$F(2,202)=182,5159$		
		$p < 0.000$				$p < 0.000$		

The third model of the study includes the variables of online customer review (as a X variable), Trust (as a M variable) and online purchase intention (as a dependent variable). In this case, while online customer review was significant for trust and online purchase behavior, it is also significant in the presence of the mediator variable (trust); confirming the partial mediator effect. In this case total effect size was 0,5411 with a 95% confidence interval which did not include zero; that is to say the effect was significantly greater than zero at 0.05. (Related “BootLLCI and BootULCI outputs were listed at the back of the study respectively as an SPSS output).

In Step 1 of the mediation model, the regression of online customer review with online purchase intention, ignoring the mediator, was significant, $\beta=0,541$, $t(203)$, $p=0.000$. Step 2 showed that the regression of online customer review and trust was also significant, $\beta=0,8155$, $t(203)$, $p=0.000$. Step 3 and 4 of the mediation process showed that the mediator (trust) was significant $\beta=0,107$, $t(202)$, $p=0.000$ and it has a partial mediator effect on the total model.

H₄: Web Site Reputation has an effect on online shopping intention in terms of mediating effect of trust.

Table 4.7: Model Coefficients for the Web site Reputation- Trust- Online Purchase Intention

Antecedent	Consequent							
	M (Trust)			Y (Online Purchase Intention)				
	Coeff	SE	P	Coeff	SE	p		
				<i>c</i>	0,768	0,0478	0.000	
X (Web site Reputation)	<i>a</i>	1,1703	0,0528	0.000	<i>c</i> ¹	0,273	0,078	0.000
M (Trust)				<i>b</i>	0,423	0,056	0.000	
	<i>i</i>							
Constant	<i>M</i>	1,8959	0,5334	0,0005	<i>i</i> _Y	1,389	0,44	0.000
		$R^2=0,7076$				$R^2= 0,6567$		
		$F(1,203)= 491,3301 ,$				$F(2,202)=. 193,1840$		
		$p < 0.000$				$p < 0.000$		

The fourth model of the study includes the variables of website reputation (as a X variable), trust (as a M variable) and online purchase intention (as a dependent variable). In this case, while website reputation was significant for trust and online purchase behavior, it is also significant in the presence of the mediator variable (trust); confirming the partial mediator effect. In this case total effect size was 0,7987 with a 95% confidence interval which did not include zero; that is to say the effect was significantly greater than zero at 0.05. (Related “BootLLCI and BootULCI outputs were listed at the back of the study respectively as an SPSS output).

In Step 1 of the mediation model, the regression of website reputation with online purchase intention, ignoring the mediator, was significant, $\beta=0,768$, $t(203)$, $p=0.000$. Step 2 showed that the regression of website reputation and trust was also significant, $\beta=1,1703$, $t(203)$, $p=0.000$. Step 3 and 4 of the mediation process showed that the mediator (trust) was significant $\beta=0,273$, $t(202)$, $p=0.000$ and it has a partial mediator effect on the total model.

Table 4.8: Summary Table of Hypotheses Tests

Hypotheses	Accepted/Rejected
H ₁ : Security has a significant effect on online shopping intention through trust.	Accepted
H ₂ : Website quality has a significant effect on online shopping intention through trust.	Accepted
H ₃ : Online consumer reviews (OCR) has a significant effect on online shopping intention through trust.	Accepted
H ₄ : Web Site Reputation has a significant effect on online shopping intention through trust.	Accepted
H ₅ : Trust has a significant effect on online shopping intention.	Accepted

Conclusion

According to Ghani & Sidek (2009), e-commerce is one of the greatest trends of our days and the main aim here is the transformation of the traditional trade into electronic trade and make peoples lives more and more comfortable. However, as long as the trust factor is one of the top priority concepts in e-commerce, the companies should pay extreme attention to this subject.

These four indicators are also has been proven statistically in our research. It has been proven that these four indicators are affecting customers Online purchasing behaviour. These four indicators take an active role in the formation of the trust factor and obviously prove which factors are playing an important role in online consumers purchasing behaviour.

Our study has set forward factors that build consumer confidence. In short, if crucial factors such as Privacy/Security, Website Quality, Online Consumer Review – OCR and Website Reputation are applied for enterprises doing e-commerce, this strategy can lead the company to a long-term success. Building of these strategies within this context has caused new e-commerce businesses to become more successful in the sector.

REFERENCES

1. Alam. S. Sh & Yasin.N.M (2010). ‘‘What factors influence online brand trust: evidence from online tickets buyers in Malaysia’’ *Journal of Theoretical and Applied Electronic Commerce Research*. Vol 5No 3, pp 79-82.
2. Manthan Brahambhatt, Bidisha Roy and Bidisha Roy. (2015). ‘‘Comparison of B2C E-commerce Websites Trust Assessment Models. India’’. *International Journal of Engineering and Technical Research*. Vol. 4 No 12. pp 435.

3. Bojang.I (2017). "Determinants of trust in B2C e-commerce and their relationship with consumer online trust: A case of Ekaterinburg, Russian Federation". *Journal of Internet Banking and Commerce*. Vol. 22, No. S8. pp 16.
4. Franco. E.C, & Regi. S.B (2016). " Advantages and challenges of e-commerce customers and businesses: In India Perspective" *International Journal of Research Granthaalayah*. Vol. 4, No. 3, pp 7.
5. Ganapathy1 V.B, Kumar V.K (2014). "E-government: Concepts and applications". *IPASJ International Journal of Computer Science (IJCS)*. Vol 2, No8. pp 18.
6. David Gefen , Detmar Straub. (2003). *Managing User Trust in B2C e-Services, USA*.
7. Halis. B (2012). " The changing face of consumption: E-commerce applicationsand the role of social networks" *Journal of History Culture and Art Research* Vol. 1, No. 4. pp 155-156.
8. H. Y. Ha (2004). "Factors Influencing Consumer Perceptions of Brand Trust Online, *Journal of Product & Brand Management. UK*". Emerald Group Publishing Limited. Vol. 13 No: 5, pp329-342.
9. Kumar.P.S, Umashankar.C, Rani.K.J, Ramana.V.V.V (2010). " e-Governance applications for citizens- Issues and framework." *International Journal on Computer Science and Engineering*. Vol. 02, No. 07. pp 2362-2363.
10. Katawetawaraks. C & Wang. L .CH " Online shopper behavior: Influences of online shopping decision". *Asian Journal of Business Research*. Vol 1, No 2. pp 67-68.
11. Lee J, Park Do-Hyung and Han I (2011). "The different effects of online consumer reviews on consumers" *Purchase Intentions Depending on Trust in Online Shopping Malls*". Emeraldinsight. Vol 21, No 2. pp 188.
12. Lee. J, Park. D. H &Han. I (2008). "The effect of negative online consumer reviews on product attitude: *An information processing view*" Elsevier. Vol 7, pp 188.
13. Mishra.K.M (2010). " Why is eBay the most successful online auction?". *Global Journal of Management and Business Research* . Vol 10, No 9. pp 62.
14. Moustakis V.S, Litos. Ch, Dalivigas.A & Tsironis.L (2004). "Website quality assessment criteria" *Proceedings of The Ninth International Conference on Information Quality (ICIQ-04)*. Greece, pp 61.
15. Mjung Ja Kim, Namho Chung , Choong Ki Lee. (2011). "The effect of perceived trust on electronic commerce: shopping online for tourism products and services in South Korea, South Korea". *EconPapers*. Vol. 32, No 2, pp 257.

16. Niranjanamurthy M, Kavyashree N , Mr S.Jagannath , Dharmendra Chahar (2013). “ *Analysis of E-Commerce and M-Commerce: Advantages, limitations and security issues*”. International Journal of Advanced Research in Computer and Communication Engineering.Vol 2, No 6.
17. Srinivasan. S (2004). “ *Role of trust in e-business success*” The Emerald Research. Vol 12, No 1. pp 66-68.
18. Şimşek. A. (2016). “Investigation of trust attitudes of electronic commerce website users: An empirical study in Uşak province”. *KMU Journal of Social and Economic Researche*. Vol.18 No 30, pp 11.
19. Tian. B , Liu. K &Chen. Y (2015). “Dynamical trust and reputation computation model for B2C e-commerce” *International Journal of Engineering and Technical Research*. Vol 4, No 12, pp 413.
20. TUSIAD. (2017). *Driving forces behind digital transformation: E-commerce*.