



FACTORS INFLUENCING BUILDING CONSUMERS' INITIAL TRUST IN E-COMMERCE

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Keywords:

E-commerce trust; product characteristic; website design quality; support factor; security and reputation; purchase characteristics; advertising factor.



ABSTRACT

This study aimed to investigate factors influencing building consumers' initial trust in e-commerce in Ethiopia. Mizan-Tepi University academic staffs were chosen as the population for this study. A quantitative research approach with an explanatory research design was employed. All the independent variables used in the research were formulated based on the extant literature review, and initial trust in e-commerce adoption used as an outcome variable. A total of 130 usable questionnaires collected from respondents using a convenience sampling method and the data were analyzed using SPSS version 23 software. The results show that website design quality, security and reputation, purchase characteristics and advertising factor positively contributes to consumers trust in e-commerce. Diversely, the purchase characteristics and support factors have no significant effect on consumers' initial trust in e-commerce. Thus, it is essential that managers and owners of shopping websites need to consider these effective initial trust-building factors in e-commerce adoption.

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1. INTRODUCTION

The Cheskin Research Trust Study (1999) describes trust as a dynamic process that deepens or retreats as a function of experience. Since trust is based on experience over time, establishing initial trust can be a major challenge to newcomers to EC, particularly those who do not have well established off-line brands. Due to COVID-19 both government and private sectors have put many efforts to prosper the virtual shopping platform in Ethiopia. And also, an opening of e-commerce by ALIBABA Company, online shopping is gaining its attention in Ethiopia. However, trust is one of the elements or factors that pose a threat to the establishment as well as the successful operation E-commerce.

Despite the huge amount of theoretical literature in the area of e-commerce trust, there is little empirical research or investigation that shows how all the dominant factors

influence consumer trust. My own analysis after reviewing the extant literature shows that the area needs further empirical investigation specifically on the factors of customer online trust. Therefore, there is a growing demand for more empirical studies to be conducted in this area in order to unveil crucial specific factors that help to establish consumer trust. In order to bridge the gap, this research seeks to answer the research question like what are the dominant factors of consumer online trust in Ethiopia. In addition to the above general objective, this study aimed to answer the following specific objectives:

- To examine the effect of purchase characteristic has on building consumers' initial trust in e-commerce transaction
- To examine the effect of security and reputation on building consumers' initial trust in e-commerce transaction

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- To examine the effect of advertising on building consumers' initial trust in e-commerce transaction
- To examine the effect of product characteristics on building consumers' initial trust in e-commerce transaction.
- To examine the effect of website design quality on building consumers' initial trust in e-commerce transaction
- To examine the effect of Support factor on building consumers' initial trust in e-commerce transaction

2. LITERATURE REVIEW

2.1 Conceptual Framework and Hypothesis Development

2.1.1 Product Characteristics and Initial Trust in E-Commerce

Consumers in online marketplaces have to rely on electronic information without having the ability to physically inspect the product. Further, uncertainty about product quality can also be a problem for consumers in the online environment. Although an online store may offer high-quality products at lower prices, the consumer may be skeptical over quality, compared with higher priced but better known online brands. While having a well-known brand reduces the risks for consumers in doing business with a leading online vendor, familiar quality product with established records of performance help in building trust. Due to their well-known product brands, Internet market leaders are more highly trusted by consumers. Thus, quality product characteristics should be an important factor for new consumers to initialize online trust.

H1: Product characteristics factor is positively associated with consumers' initial trust in e-commerce adoption

2.1.2 Website Design Quality and Initial Trust in E-Commerce

Web quality design plays important role to attract, gain and retain customers. A high-quality website not only determines customer decision to purchase, but also becomes a main reason whether a customer will purchase online or not (Liao et al., 2006). Low quality of website could impact on customer lost, cost escalation and profit reduction. Therefore, it is important to know how web quality impact on customer trust of the website, that eventually determines purchasing decision. Some of web quality elements, they are information quality, response time and visual attraction, impact to what customers perceived (Liao et al., 2006).

Wang & Emirian (2005) studied how interface design factors affect consumer trust in e-vendors. Their results suggest that graphic design (e.g. colors and photographs), content design (e.g. seals of approval and current product information), and social-cue design (e.g. possibility to communicate with the vendor or inclusion of representative photographs) have significant effect on consumer e-trust. Moreover, Merrilees & Frye (2003) found that effective interaction between website and consumer enhanced consumer trust; and Pavlou & Dimoka (2006) found that written feedback increased consumer e-trust. If customers feel the website has high quality, then they tend to have high trust to seller. They believe the seller has competence, integrity, benevolence and they have willingness to depend on the seller (Liao et al., 2006). Based on this, the following hypothesis is proposed.

H2: Website design quality factor is positively associated with consumers' initial trust in e-commerce

2.1.3 Support Factor and Initial Trust in E-Commerce

Customer support during and after purchases is a critical component in the value proposition. Customer service representatives should be knowledgeable and concerned about customer experiences. Some products need extra customer support. For example, when a user purchases software such as Constant Comment to design e-mail newsletters and maintain e-mail databases, technical support becomes important. Customer service reps help customers with installation, maintenance problems, product guarantees, and service warranties, and in general work to increase customer satisfaction with the firm's products. Some researchers stated that firms can maintain consumer retention by responding to service failures in a fair manner (Huppertz, et al., 1978). These findings suggest that purchase intentions will remain stable, and possibly increase, when service recovery is effective. These findings imply that effective customer service also decreases consumer risk and inspires trust again. On the other hand, a poor customer service effort may substantially reduce their future intentions to purchase from the failing firm, because the firm does not keep its promise and that dramatically reduce the trustworthiness of the firm. Therefore, this study considers that an effective customer service will affect trust between consumers and online vendors.

H3: Support factor is positively associated with consumers' initial trust in e-commerce adoption

2.1.4 Security, Reputation and Initial Trust in E-Commerce

Security has been widely recognized as one of the major obstacles to adoption of e-commerce. Security has been defined as the protection against the threat that creates "circumstance, condition, or event with the potential to

cause economic hardship to data or network resources in the form of destruction, disclosure, modification of data, denial of service, and/or fraud, waste, and abuse". Using this definition, in the context of electronic commerce, threats can be made either through network and data transaction attacks or through unauthorized access to the account. The means by which unauthorized access to account occurs is via false or defective authentication such as the theft of credit card information, or stealing of personal information. Perceived security then is the consumers' perception of the degree of protection against these threats. Security controls that provide technological and organizational support to e-commerce, ensure timely and accurate completion of transactions, prevent fraud and third-party manipulation, assure smooth transactions, and safeguard transaction authentication to insure against damage.

Reputation is conceptualized as the consumer's perception of a store's reputation, where reputation is defined as the extent to which consumers believe a store is honest and concerned about its consumers (Doney and Cannon, 1997). Where consumers do not have personal experience with a vendor, word-of-mouth reputation can be a key to attracting consumers. Hearing from others of their positive experience with a vendor can help ease users' perceptions of risk and insecurity when interacting with the online vendor. According to (McKnight *et al.*, 1997) online vendors with a good reputation are seen as trustworthy and those with a bad reputation are seen as untrustworthy. Furthermore, the reputation of an online vendor is likely to influence a buyer's trust towards that vendor (Friedman *et al.*, 2000). Hence, a good reputation suggests certainty and less risk in conducting business, and so helps foster consumer trust.

Some empirical studies related to the reputation of an online vendor associated with trust have been identified in the literature. For example, research carried out by (Jarvenpaa *et al.*, 2000) based on online shopping with books or travel, suggested that the reputation of online vendor has a positive impact on online trust. Similarly, the findings demonstrated that the perceived reputation has a significant effect on consumer trust in the e-commerce context. Where as, the larger the perceived reputation is, the greater the trust in the company. The reputation can enhance trust. If a company has an established good reputation customer can be surer that the company will not act opportunistic, since it has much more to lose in case of a bad behavior.

H4: security and reputation factors are positively associated with consumers' initial trust in e-commerce

2.1.5 Purchase Characteristics and Initial Trust in E-Commerce

Purchase characteristics represent buyers. It is frequently claimed that the growth of e-commerce has created a more competitive environment. It is argued that lower

production costs of online retailers encourage new entry in previously concentrated sectors, and a marked reduction in search costs and switching costs increase the intensity of competition. Buyers' purchase decisions may be distorted by the lack of trust in some retailers; switching costs may be more significant than they are claimed to be; and price comparison may not be perfect. The physical separation of buyers and sellers in online markets, and the temporal separation between paying for a good and receiving it, creates a potential problem of trust.

In such situation buyers may be prepared to pay a premium for the security of buying from a reputable store. The prior study shows that using discount and gifts in the website, products/services price, payment methods and characteristics of delivery system used e-commerce is one of the effective factors building on initial trust. Product characteristics, purchase characteristic, and support are factors which are introduced and tested in the prior study as effective factors on initial trust. Thus, it is proposed that:

H5: Purchase characteristic factor is positively associated with consumers' initial trust in e-commerce adoption

2.1.6 Advertising and Initial Trust in E-Commerce

Many scholars have looked into diverse aspects of online advertisement and their effect on consumer's intention to purchase. Wu (2003) found out that the quality of on-line reviews has a positive effect on consumers' purchasing intention and purchasing intention increases as the number of reviews increases. Online advertisements are portions of a website that are formatted for the purpose of delivering a marketing message that seek to attract customers to purchase a product or service. Advertisement differ in their characteristics such as size, format, content, design and type (Manchanda *et al.* 2002). These factors can substantially influence advertisement effectiveness which is considered important to the marketers to ensure that their advertisements have affected their target audience.

Many researchers have investigated the role of these characteristics on online advertisement effectiveness, visibility and purchasing intention. For instance, Rettie *et al.* (2004) found that advertisement size has a positive effect on increasing click-through rates. The same was found by the study of Baltas (2003) on the determinants of internet advertising effectiveness, where he concluded that bigger advertisements are more effective in attracting attention and hence more likely to response. On the other hand, Lohtia *et al.* (2003) found that design and content of the advertisement have an impact on Click-Through Rate (CTR) and increases the interest in Advertising. Online advertising, advertising in other media, and satisfaction and good evaluation of past

consumers is identified as one of the effective factors in building initial trust. Advertisements especially in virtual social networks as an important variable to building initial trust. So, it is proposed that:

H6: Advertising factor is positively associated with consumers' initial trust in e-commerce

2.2. Conceptual Framework

The conceptual framework for this study (Figure 1) is developed from an in-depth review of the literature examining the theoretical basis of consumers' initial trust

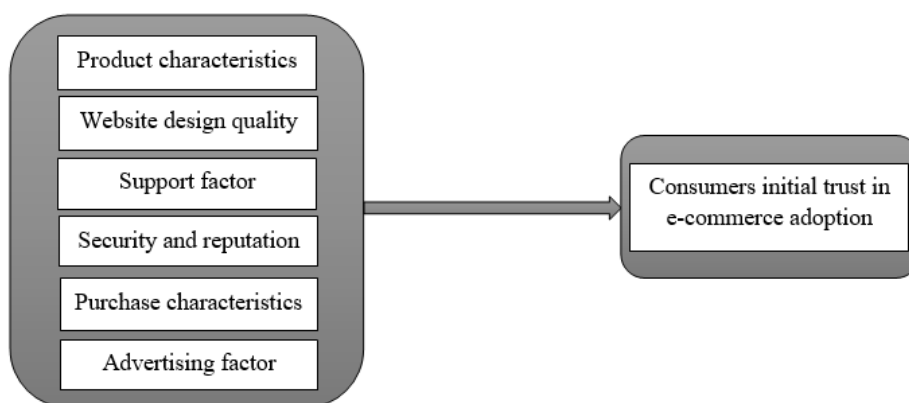


Figure 1. Conceptual Framework

3. METHODOLOGY

3.1 Research Design

The study focused on the factors influencing building consumers' initial trust in e-commerce in Ethiopia. Thus, a cross-sectional explanatory research design was employed. Such a design is especially important when the objective is to measure a snapshot of reality and quantify the effect in a systematic way, which this study is all about.

3.2 Target Population and Data Collection Method

This study focuses on consumer trust in the e-commerce contexts and the target population was Internet users. University academic staffs were chosen as the research population for this study. The selection of subjects was deemed to be appropriate for the following reasons: The majority of internet users were generally younger and more highly educated than conventional consumers, which makes university staff samples closer to the online consumer population. The majority of adult Internet users have a university education and this population represents the fastest-growing group of Internet users. University academic staffs are a very good target group for research study in the field of e-commerce since they have free access to the internet and have the opportunity to use this medium for communication and commercial transactions.

in e-commerce factors. Based on the previous study six variables (Product Characteristics, Security & Reputation, Website Design Quality, Support, Purchase Characteristic, and Advertising) as effective factors for building initial trust were identified, that would be investigated to determine their impacts on customer trust in a business-to-customer e-commerce environment.

3.3 Sampling method and Sample Size Determination

Paper questionnaires were distributed to the academic staff of Mizan Tepi University. To choose the statistical population of the study regarding the aim of the research, the following two conditions are considered. First, avoiding invalid data from questionnaires, the questionnaires of the study were distributed among academic staffs of the Mizan Tepi University because staffs are familiar with the Internet and online shopping (Ol fat *et al.*,2011).The second condition was, it can be said that to follow the purpose of the research and identify the factors affecting building initial trust in buying for the first time from a website, in addition to the viewpoints of people who had Internet shopping experience, the opinions of people who hadn't any experience are also necessary.

3.3 Sampling method and Sample Size Determination

The study used convenience sampling as a selection method. It was tried ask people that did not seem to be in a hurry since it is probably easier to get them to participate. To get a variety of respondents it was tried to ask, peoples on various age group starting from 18 years of old and above. To determine the sample size of this study, the following formula was used. Based on the formula, a 189 sample size was determined.

$$n = p (1-p) \frac{(Z\alpha/2)^2}{E}$$

Where:

- n = sample size,
- P = proportion, when it is not known P = 0.5 will be taken,
- α = significance level (0.05)
- E = margin of error and will have value (0.04 - 0.06) usually or take 0.5

3.4 Variables and Their Measurements

The independent variable of the study was measured by six constructs (purchase characteristic, security and reputation, advertising, product characteristics, website design quality, and support factors in building initial trust factors), A total of 24 items (4 items for each of purchase characteristic, security and reputation, website design quality and product characteristics factors, 5 items for support factor and 3 items for advertising factor) were used to measure such six independent variables.

The dependent variable (the initial trust in e-commerce adoption) items were adapted from scales that are previously had developed and tested (with Cronbach's

alpha>0.90) by. All the variables of this study were measured based on a five-point scale ranging from 1 = strongly disagree to 5 = strongly agree developed.

Internal consistency among the respective items served as a measure of reliability for each of the dimensions in the model. Cronbach's alpha and item-to-total correlation were utilized to eliminate the poor performing items from the initial pool. A 0.70 alpha value was used as a cutoff value to determine which items to retain a value of .50 was considered as an acceptable level of corrected item to-total correlation to maintain an item.

The Cronbach's alphas for the six independent variables ranged from (0.767 to 0.937; the corrected item-to-total correlation coefficients ranged from 0.32 to .0.91 (see table 1). Based on suggested criteria, the results of internal consistency tests revealed that the Cronbach's alpha value and item to-total correlations of two items were not acceptable. One item from website quality and design (WQD1) and one item from support factor variables (SP5) were not fulfilled the criteria (see table 1).

Table 1. Website quality design and support factor variables

Factors of initial trust	Corrected item-to-total correlation	Cronbach's α Coefficient	
		Before modification	After modification
Product characteristics factors		0.82	
PrdtChr1	.604		
PrdtChr2	.639		
PrdtChr3	.678		
PrdtChr4	.647		
Website Quality Design		0.88	0.937
WQD1	.491		
WQD2	.844		
WQD3	.915		
WQD4	.850		
Support Factor		0.773	0.793
SP1	.606		
SP2	.642		
SP3	.591		
SP4	.572		
SP5	0.32		
Security and reputation		0.843	
Sec&prv1	.709		
Sec&prv2	.691		
Sec&prv3	.743		
Sec&prv4	.575		
Purchase Characteristics		0.874	
PurChr1	.674		
PurChr2	.818		
PurChr3	.763		
PurChr4	.673		
Advertising Factor		0.767	
Adv1	.730		
Adv2	.732		
Adv3	.771		
Initial Trust		0.819	
Trust1	.619		
Trust2	.701		
Trust3	.703		

The results of the reliability tests in Table 1 showed that the above items had low item to total correlation ($r = 0.49$, and 0.32) respectively. As a result, the items were dropped from the item because the construct's alpha value would improve from 0.88 to 0.937 and from 0.77 to 0.793 for website quality design and support factor variables respectively if the item was deleted.

4. DATA PRESENTATION AND DISCUSSION

A total of 189 (one hundred eighty-nine) structured questionnaires were dispatched and some 145 were returned. However, the fifteen questionnaires from the

returned ones were either improperly filled or with many missed values. Hence, analysis was made based on the responses obtained from 130 questionnaires.

4.1. Correlation Analysis

In order to show how each of the variables considered associated with one another, the Pearson's correlation analysis was used. Accordingly, table 2 below shows how well the variables are correlated with one another and with the dependent variable (initial trust) which is my variables of interest.

Table 2. Correlations

		Correlations						
		1	2	3	4	5	6	7
Initial trust	Pearson Correlation	1						
Product characteristics	Pearson Correlation	.360**	1					
Security & reputation	Pearson Correlation	.496**	.499**	1				
Purchase characteristics	Pearson Correlation	.428**	.390**	.400**	1			
Advertising	Pearson Correlation	.407**	.176*	.192*	.144	1		
Web Quality	Pearson Correlation	.521**	.307**	.346**	.293**	.428**	1	
Support	Pearson Correlation	.351**	.509**	.605**	.587**	.149	.354**	1

** . Correlation is significant at the 0.01 level (2-tailed).* . Correlation is significant at the 0.05 level (2-tailed).

As it is presented above, the correlation between each of the independent variables and the dependent variable is statistically significant at 5% significance level. In this case, the highest correlation coefficient is found between initial trust and proactive web quality ($r = 0.521$, and p -value of 0.01). Similarly, the correlation between Security & reputation, Purchase characteristics, Advertising and initial trust is significant (which is $r = .496$, p -value 0.01 , $r = .428$, p -value 0.01 , $r = .407$, p -value 0.01 .) respectively, and the correlation between Product characteristics, Support and initial trust is positive and statistically significant ($r = 0.360$, and p -value 0.01) and ($r = 0.351$, and p -value 0.01).

4.2. The Regression Analysis

Before actually running the multiple linear regression models, it is important to first check whether the assumptions for the model are satisfied. Hence, the multicollinearity test, normality test, linearity test, and heteroscedasticity tests were made and all the assumptions are sufficiently satisfied. Finally, the overall model fitness test was made using the ANOVA table 3 as default output of the regression analysis.

Table 3. Correlations

Model	Sum of Squares	Df	Mean Square	F	Sig.	
1	Regression	515.325	6	85.888	17.822	.000 ^b
	Residual	592.744	123	4.819		
	Total	1108.069	129			

a. Dependent Variable: **Initial Trust**, Prpredictors: (Constant), Prdt Chr, Sec & prv, Pur Chr WDQ, SP, Adv

Hence, the model is statistically significant indicating that the model is fit for analysis and the independent variables in the model are highly likely to predict the variations in the dependent variable (initial trust) (Table 4).

Table 4. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.682 ^a	.465	.439	2.19524	1.824

As observed in the model summary (Table 4), the overall contribution of independent variables (Purchase characteristic, security and reputation, Advertising, and Website design quality) to the Consumers' initial trust in e-commerce transaction accounted for 46.5 % ($R^2 = 0.465$) of the variation in the Consumers' initial trust in an e-commerce transaction, the rest 53.5% are other variables not included in this study.

Table 5. Regression Output

Regression Output								
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.180	.963		-.187	.852		
	Purchase characteristics	.181	.059	.253	3.070	.003	.638	1.568
	Security and reputation	.226	.061	.321	3.683	.000	.571	1.751
	Advertising	.184	.068	.199	2.718	.008	.812	1.232
	Prdt Characteristics	.041	.062	.054	.668	.506	.665	1.503
	Web Quality	.274	.075	.287	3.667	.000	.708	1.413
	Support	-.110	.071	-.151	-1.554	.123	.463	2.162
a. Dependent Variable: Initial trust								

Hypothesis 1: Purchase characteristic factor is positively associated with consumers' initial trust in e-commerce

As shown in table 4.10 above the beta coefficient of purchase characteristic ($\beta = .253$, $t = 3.070$, $P < 0.01$) was positively related with the consumers' initial trust. This result showed that purchase characteristic has a significant positive influence on consumer online trust, enabling us to confirm the hypothesis. This implies that considering or increasing purchase characteristics like using discounts and gifts on the website, using different payment methods and delivery methods in the online transaction by one unit, will positively contribute to building consumers' initial trust in e-commerce adoption by 25.3%.

Hypothesis 2: security and reputation factors are positively associated with consumers' initial trust in e-commerce

The second hypothesis was intended to test the relation between security and reputation and consumers' initial trust. The result of the current study revealed a positive and significant relationship between security and reputation and consumers' initial trust. The value of the beta coefficient for his construct is ($\beta 0.321$, $t = 3.683$, $p < 0.000$). This coefficient means that enhancing the security and reputation in online transaction by 1 percent, it will positively contribute on building consumers' initial trust to engage in online transitions by 32.1% with the other independent variables being constant. Hence, supporting H2 in which security and reputation factors is positively associated with consumers' initial trust in e-commerce adoption.

Hypothesis 3: Advertising factors are positively associated with consumers' initial trust in e-commerce

The regression results for the Advertising variable show a regression coefficient of .199 with a significance value of $t = 3.683$, $p < 0.05$, this means that Online advertising, advertising in other media, and satisfaction and good evaluation of past consumers is identified as one of the effective factors in building initial trust. Therefore, H3 is

supported in which advertising factors are positively associated with consumers' initial trust in e-commerce adoption.

Hypothesis 4: Product characteristics factors are positively associated with consumers' initial trust in e-commerce

The result of the regression coefficient revealed that a positive but significant relationship between product characteristics and consumers' initial trust. Therefore, H4 is rejected since the significant value is greater than 0.05.

Hypothesis 5: Website design quality factors are positively associated with consumers' initial trust in e-commerce adoption

The regression result for the website design quality variable shows a positive and significant effect on consumers' initial trust. The value of the beta coefficient for his construct is ($\beta 0.287$, $t = 3.667$, $p < 0.000$). The result is then supported H5 in which website design quality factors are positively associated with consumers' initial trust in e-commerce adoption.

Hypothesis 6: Support factor is positively associated with consumers' initial trust in e-commerce

The results of the regression analysis show that the support factor has no significant influence on building consumer online trust since the significant level is greater than 0.05 ($p > 0.05$), which gives us substantial statistical evidence to reject the proposed hypothesis.

5. DISCUSSION AND CONCLUSION

5.1 Discussion

As stated earlier, this research is aimed to examine the factors that influence building consumers' initial trust in e-commerce adoption when the consumer wants to connect with an Internet store after making a decision to shop. The results of the multiple regression analysis show that security and reputation have a significant positive influence on consumer online trust scoring $\Delta = 0.01$;

$p < 0.05$, which gives us substantial statistical evidence to confirm the hypothesis. This result is quite consistent with previous literature such as (Wang DY, et al., 2004; Chellapa RK, 2006; Yousafzai SY, et al., 2005) where they argued that perceived security is positively associated with trust in an e-commerce context. Similar findings in Chen and Barnes Chen Y, et al. 2007; Lau et al. Lau TC, 2010) argued that the perceived security of an online consumer may affect their willingness to engage in online purchase activities. This implies that when online vendors protect consumer information through robust security systems, firewalls as well as non-disclosure of personal information to third parties, availability of information privacy policies, and website payment systems security then consumers will be more comfortable to purchase online. This will reduce the risk as well as the uncertainties associated with online transactions. In addition, a regression analysis showed that it is the most influential determinant factor that affects consumer online trust. Security has a standardized regression coefficient β value of 0.321 which was the highest among the four predicting variables.

An alpha (α) value of 0.287; $p < 0.000$, was obtained for the variable web quality design. This result showed that web-quality has a significant positive influence on building consumer online trust, enabling us to confirm the hypothesis. This implies that ease of use and navigation by customers, Speed of page loading of the web, findable web site design and web pages organizing and easily finding search facilities finding vendor (company) then consumers will have trust for online transactions. Meanwhile, a multiple regression analysis of the result also showed that web-quality design is the second most influential factor that impacts consumer online trust, with a standardized coefficient β value of 0.287. An alpha (α) value of 0.253; $p < 0.05$ was obtained after conducting a regression coefficient test for the variable of purchase characteristics.

The results of the test indicate that a purchase characteristic has a significant positive influence on consumer online trust. Hence the hypothesis was confirmed. This implies that using discounts and gifts on the website, using products/services price, availability of different payment methods, and clearly indicating characteristics of delivery system on the web will be effective factors to build consumers initial trust in an online transaction. Meanwhile, results of further testing through multiple regression analysis also showed that the purchase characteristics are the third most influential determinant of consumer online trust with a standardized regression coefficient β value of 0.253, and finally, advertising has the least significant positive influence on building consumer online trust. However, both variables product characteristics and support factors have an alpha (α) value of 0.506; $p > 0.05$, and 0.123; $p > 0.05$ respectively, thereby making us reject the hypothesis since the alpha value is greater than 0.05.

5.2 Conclusion

The results of testing research hypotheses using multiple regressions were summarized in table 5. As shown in a table based on t statistic, except for two hypotheses (H4: Product characteristic factor is positively associated with consumers' initial trust in e-commerce and H6: Support factor is positively associated with consumers' initial trust in e-commerce) all hypotheses are supported at 99% and 95% confidence level. So, one can conclude that variables like an advertisement, purchase characteristics, security and reputation, and website design quality are factors that are introduced and tested in this paper as effective factors on building consumers' initial trust.

To summarize, the four hypotheses out of six that were identified specifically for this study were supported and confirmed. Running a regression analysis shows that the security and reputation of online transactions have a major influence on building initial consumer online trust in an e-commerce transaction. This is followed by website design quality, purchase characteristics, and finally advertising factor. Meanwhile, product characteristics and support factors have an insignificant influence on consumers' initial trust.

The outcomes of this paper confirmed the results of research about e-commerce so that the factors that are investigated in this paper are introduced as effective factors in e-commerce in previous studies such as, Gefen (2002), Wang & Emurian (2005), Liao *et al.* (2006), Khodadad Hoseini *et al.* (2010).

The other finding of this study is that the R^2 value of consumers initial trust is 0.46, indicating that 46.5% of the variances in the construct of consumers initial trust may be explained by security and reputation, website design quality, purchase characteristic, and advertising factors while the remained 54.5% is due to forecasting error and it can include other influencing variables.

6. MANAGERIAL IMPLICATIONS

According to the significant coefficient of the four factors, it is clear that these groups are not independent of each other. Thus, it is recommended that managers and owners of shopping websites consider all four groups together for designing shopping websites. Also, it is recommended that managers notice advertisements, especially in virtual social networks as an important variable to build initial trust. Meanwhile, the findings of this empirical study indicate that security and reputation, website design quality, purchase characteristic, and advertising factors are critical factors that significantly influence online trust in B2C e-commerce.

In light of this online retailers need to initiate and develop strategies that will promote consumer trust and confidence. In light of this online retailers need to develop robust security solutions and strong firewalls to

protect consumers' personal information from looming threats of cyber fraud and scams. This further implies that retailers should create websites that model simplicity yet incorporated strong security mechanisms and slick designs that would engender consumer trust and by extension promote confidence in online transactions. On website quality, online retailers need to develop user-friendly interfaces that will enhance the navigation and promote the overall user experience. Designing an easy-to-use website is the responsibility of the vendor. Online vendors should try to fathom the various sequence of activities, functionalities, and information that match consumer mental models of typical customary websites. Online retailers can improve design quality through a review of established websites. This could be done through consumer focus groups that will review websites and give feedback on their overall experience.

7. RECOMMENDATIONS FOR FUTURE RESEARCH

The first recommendation is for the potential researcher in the upcoming investigation it is essential to increase the sample size in order to generate accurate, reliable data and to get results that will help for making strong generalization. In conducting future research, other variables should be considered in assessing their level of influence and association with consumer online trust. Variables such as purchase characteristics, security and reputation, advertising, product characteristics, website design quality, and support factors were investigated in this study. However, other trusting beliefs such as loyalty, reliability, and openness were also suggested to be further investigated. In addition, customer care or service, information, perceived risk, the propensity to trust, benevolence, as well as other determinants of consumer online trust needs to be investigated, in order to fathom the consumer online trust regarding B2C e-commerce.

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