# THE EFFECT OF TRUST, RISK, AND WEB DESIGN ON CONSUMER INTENTION BY MEANS OF CONSUMER ATTITUDE TO PURCHASE ONLINE

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#### Bayu Anugerah Perdana Wijaya Putra

Master of Management Faculty of Economics and Business Universitas Brawijaya
Fatchur Rochman
Noermijati

Faculty of Economics and Business Universitas Brawijaya

**Abstract:** This study analyzed the effect of trust, risk, web design and its relation with consumer attitude and consumer intention to buy online in Malang. Population in this study are society of Malang and the number of the sample is 120 respondents. The sampling techniques is purposive sampling and the data is analyzed with parsial least square (PLS) analysis. The results indicate several findings that trust, risk, web design and consumer attitude have direct effect on consumer intention to buy online. Web design have an efffect on consumer intention to buy online through consumer attitude. But not with trust and risk, because trust and risk does not have significant effect on consumer intention to buy online through consumer attitude.

**Keywords:** Trust, Risk, Web Design, Consumer Intention to Buy Online, Consumer Attitude Toward Online Buying, Online Buying.



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Correspondention Author:
Bayu Anugerah Perdana
Wijaya Putra, Master of
Management Faculty of
Economics and Business
Universitas Brawijaya,
bayuputrawijaya@gmail.com
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The development of the information age in the 21st century can be characterized by the development of information technology. One that is often discussed is the growth of the internet. The Internet is not only a lifestyle but also a necessity for most people. A small thing like sending data up to economic activity ranging from small to large scale, all of which involve the internet as the backbone. Existing data has shown the progress of the internet increasingly significant from year to year. Data obtained from

www.thecultureist.com has shown that Internet users in the Year 2013 has reached 2,802,478,934 people or has reached 39% of the world's population. The number of internet users in Indonesia in 2012 to 2013 has increased 13%, the number of Internet users is recorded as many as 71.19 million people. The development of this technology has changed human behavior, not least in economic behavior. Kotler (1999: 26) explains that technological explosions have created exciting new ways of learning and tracking consumers, creating products and services that meet consumer needs, distributing products more effectively and efficiently, and communicating with consumers individually or in groups. The Internet has created a set of rules with greater transparency, more efficient cost, more choices, consumer strength, strategic alliance changes, and new partnerships (Gay, et al., 2007: 2).

In the days before the Internet to conduct a sales transaction, one must do it conventionally. Buy and sell transactions work in a simple way, buyers and sellers must meet at a place to make sales transactions. But that changed since the discovery of the internet, buying and selling systems no longer need to be done face to face, which is further known as internet marketing or cyber marketing. Kim, et al. (2008), states that the characteristics of cyberspace transactions are blind in the sense that buyers and sellers can not meet, without limitation, can be done within 24 hours, and not instantly in the sense that payments can be made a day or week before delivery is made. This transaction process only takes the trust between the buyer and the seller. Based on that then a seller must be able to create an environment that makes consumers feel comfortable and confident in making transactions.

The biggest problem for developing countries is actually raising trust to consumers. Daily Social Research (2011) in his research explains that the reason why consumers do not make online purchases is primarily related to trusts, be it with the site service providers and with the goods it sells. This confidence issue is the main reason why consumers do not buy online. Respondents say that the issue is related to their past or the assumption that they are worried that the goods they buy and receive do not match what the service provider's site offers. The results of Kim's research, et al. (2008), found that the level of trust and risk felt by internet consumers have a strong influence on their decision in making purchases. In addition, the consumer's disposition of trust, reputation, awareness of privacy, security concerns, the quality of information from the website, and the reputation of the company have a strong influence on consumer confidence in the website. Corbit, et al. (2003), also explained that consumers seem to be choosing to buy from the internet if they feel a high level of trust and have more experience in using the internet. Consumer confidence is influenced by the perceived level of market orientation, site quality, technical trust, and consumer experience in using the internet. Consumers with high levels of trust are likely to be more likely to participate in commerce over the internet.

Positive 'Word of mouth', money-back guarantee, and partnership with renowned business partners are the top three tactics in effective risk reduction. Consumer intention to purchase online is not only influenced by a trust but also Risks, web design, and also consumer attitude. Bhatnagar, et al. (2000), grouping risks when making transactions via the Internet into three things, namely financial risk, product risk, and information risk. Financial risk is associated with opportunity and time costs. This financial risk is not related to the product but to the marketing channel. Product risks relate to the product itself. A product may become defective or damaged during shipment. Last is the risk of information, the risk of information here is related to privacy and security. Requirements that require consumers to enter credit card information over the internet make the data in the credit card vulnerable to being stolen and misused. Bianchi and Andrews (2012), using five variables that influence consumer intention to purchase online with consumer attitude toward online purchasing as a mediator. These five variables are perceived risk online, trust in online vendors, trust in third party assurances, consumer propensity to trust, and cultural environment of trust. Consumer intention to purchase is not only influenced by trust and risk. Shergil and Chen (2005), in his research, put the variable web design and its influence on consumer attitudes to buy online. Nature, et al. (2008), in his research on the factors that affect the online purchase intention, they include web design as one of the factors. Factors such as web design, reliability, customer service, trust and racial differences are independent variables that influence dependent variables. The results above revealed that there is no significant relationship between web designs with purchase intention. This study focuses on researching the influence of trust, risk, and web design on purchase intention with mediated by consumer attitudes.

#### LITERATURE REVIEW

## **Purchase Intention**

Purchase intention is the tendency of consumers to buy a brand or take action relating to purchases that can be measured with the level of possibility of consumers in making purchases (Assael, 2001). Peter and Olson (2010: 150) describes the relationship between intention and behavior. According to them, predicting consumer behavior in the future, especially their purchasing behavior, is an important aspect of forecasting and marketing planning. When planning a marketing strategy, marketers should make predictions about consumer purchases and use consumer behavior over a weekly, monthly or even yearly timeframe.

#### **Consumer Attitude**

Kotler (2003) argues that attitudes are evaluations, emotions, and actions that tend to be of lasting advantage to a person against a particular object or idea. Consumer attitudes will be influenced by what they see, what they feel, what benefits they will receive, and what values they profess. Different factors will elicit a different attitude and each individual will respond differently depending on the stimuli they receive. Schiffman and Kanuk (2007) argue that Attitudes have several components namely cognitive, affective, and conative. The cognitive component consists of the consumer's beliefs and knowledge about a product. The Trust and knowledge of these products differ from one consumer to another. The more positive the consumer's confidence will be the more positive also the attitude of consumers to the product.

#### **Trust**

Trust is a crucial thing in a business acting as an intermediary. Consumers who buy goods or services through the internet then the consumer depends on the trust that the goods or services will be in accordance with a predetermined price (Harris and Eckersley, 2003: 24). Moorman in Wang and Emurian (2005), defines trust as a willingness to rely on colleagues in which both have the confidence to exchange. Lee and Turban (2001), develop models in developing consumer confidence during shopping on the internet and identifying specific constructs in building trust. These particular constructs include trust in Internet merchants (ability, integrity, and virtue), trust in internet shopping media (technical competence, reliability, and understanding of the media) and other contextual factors (effectiveness of third party certification and the effectiveness of infrastructure security).

#### Risk

According to Bauer in Forsythe, et al. (2014), the risk is the level of a person in the sense of uncertainty about the service or goods, especially the consequences of the goods and services. Bauer first introduced the concept of risk to consumer behavior research in an attempt to explain phenomena such as information retrieval, brand loyalty, an opinion of the reference group leader, and consideration in repurchase (Bauer in Naiyi, 2004). The risk perceived by consumers is a fundamental concept in consumer behavior. The behavior that describes the repurchase is a result of the purchase and use of the product. Risks are inseparable in economic transactions through the internet. Pour (2005: 1992) explains that risk plays an important role in encouraging trust and as a prerequisite for trust to emerge as an issue if there is no risk then consumers will not make an assessment of trust. Consumers face the risk of losing a lot of time in getting the product or service they want.

## Web Design

The Web is a system with universally accepted standards for storing, retrieving, organizing, and displaying information within a network environment.

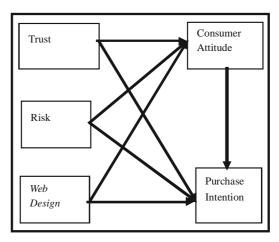


Figure 1 Conceptual Framework Source: Researcher, 2015

Information is stored and displayed as an electronic page that can contain text, graphics, animation, sound, and video. The World Wide Web or the web is a collection of multimedia-based information, services, and websites supported by the internet. Flavian, et al. (2009: 180), explains that the success of a website design is determined by Display, Navigation, Content, and Shopping Process.

- H1: Trust has a direct influence on consumer intention to purchase online.
- H2: Risk has a direct influence on consumer intention to purchase online.
- H3: Web design has a direct influence on consumer intention to purchase online.
- H4: Consumer attitudes toward online purchases have a direct influence on consumer intention to purchase online.
- H5: Attitudes mediate the influence of trust on consumer intention to purchase online.
- H6: Attitude mediates the effect of risk on consumer intention to purchase online.
- H7: Attitude mediates the effect of web design to consumer intention to purchase online.

#### RESEARCH METHODS

Type of research in this research is explanatory research. Singarimbun (2006), states that explanatory research is used to explain the causal relationship between variables through hypothesis submission. The population selected for this study is the Malang City Society. The sampling technique used in this research is purposive sampling. The number of samples taken in this study is 120. The amount is taken based on Hair, et al. (1998), which states that the minimum sample size can be taken depending on the number of indicators multiplied by 5 to 10. The data collection technique in this study is using questionnaire, then the data is processed through Partial Least Square (PLS) software. The analyzer in this research using Partial Least Square (PLS).

## RESULTS AND DISCUSSION

## Data analysis

The result of data analysis is divided into convergent validity and discriminant validity.

#### **Convergent Validity**

Convergent validity is the test of indicators in latent variables to ensure that the indicators used in this study are really well understood by respondents so that respondents do not experience misunderstanding of the indicators used.

Table 1 Convergent Validity Test Results for Indicators

	Original Sample (O)	T Statistics ( O/STERR )
X1.1 <- X1	0.822851	12.446780
X1.2 <- X1	0.807785	12.159117
X1.3 <- X1	0.715166	10.368086
X2.1 <- X2	0.886749	13.302765
X2.2 <- X2	0.984498	14.890799
X2.3 <- X2	0.959390	14.863706
X3.1 <- X3	0.768279	13.47367
X3.2 <- X3	0.70552	10.957157
X3.3 <- X3	0.771661	12.643304
X3.4 <- X3	0.784234	13.957881
Y1.1<- Y1	0.795124	17.236689
Y2.1<- Y2	0.905193	14.293978

Source: Primary data processed, 2015

Information:

Significant when the value of t-statistic > 1.96

Based on table 1. Show that the indicator value at X1.1-X2.1 shows the value > 0.700 so it can be concluded that each indicator has been able to explain each variable well.

## **Discriminant Validity**

Table 2 Test Results of AVE and CR

Variabel	AVE	CR
$\overline{\text{Trust}(X_1)}$	0,6137	0.8260
$Risk(X_2)$	0.8920	0.9611
Web Design $(X_3)$	0.5746	0.8436
Consumer Attitude (Y <sub>1</sub> )	0.6322	0.6322
Purchase Intention (Y <sub>2</sub> )	0.8194	0.8194

Source: Primary data processed, 2015

Discriminant Validity is measured based on two analyzes that refer to the Average Variance Extracted (AVE) and Compose Reliability (CR)

Based on the table above shows that the value of AVE > 0.5 on each variable. This indicates that the variables included in the validity criteria of discriminant validity are trust (X1), Risk (X2), Web Design (X3), Consumer Attitude (Y1), and Purchase intention (Y2). While the value of Compose Reliability (CR) shows that the value of Composite Reliability in each variable is greater than 0.60. It shows that the reliable variables in the composite reliability criteria are trust variables (X1), Risk vari-

ables (X2), Web Design (X3), Consumer Attitude (Y1), and Purchase intention (Y2).

#### RESULT OF HYPOTHESIS TESTING

Hypothesis testing aims to determine whether the results of data processing from the sample can be applied to the population. The basis of hypothesis retrieval is to see the t-statistic value generated from the PLS test compared to the t-table value. If the value of t-statistic > 1.96 then there is a significant influence on the value of the hypothesis tested. The results of hypothesis testing direct influence on this study are presented in the table as follows:

Table 3 Results of Hypothesis Testing Direct Effect of Trust, Risk, Web Design, and Consumer Attitude to purchase intention

Variabel Dependen	Variable Independen	Sample Original	t-statistic	Information
Purchase Intention (Y <sub>2</sub> )	$Trust(X_1)$	0.211	1.977	Significant
	$Risk(X_2)$	-0.168	2.022	Significant
	Web Design $(X_3)$	0.262	2.052	Significant
	Consumer Attitude (Y <sub>1</sub> )	0.310	2.552	Significant

Source: Primary data processed, 2015

Information:

Significant when the value of t-statistic > 1.96

Hypothesis 1 : Trust has a direct influence on consumer intention to purchase online.

Based on the results of hypothesis testing using PLS analysis known that the original value of the sample is positive with t-statistic results worth greater than 1.96. These results indicate that the relationship between trust to purchase intention is straight and significant which means that an increase in trust factor will have a significant impact on factor purchase intention. Based on the above results it can be concluded that H1 is accepted.

Hypothesis 2: Risk has a direct influence on consumer intention to purchase online.

Based on the results of hypothesis testing by using PLS analysis known that the original value of

the sample is negative with t-statistic value is greater than 1.96. These results indicate that the relationship between risk to purchase intention is reversed and significant which means that an increase in risk factor will have a significant impact on the decrease in factor purchase intention. Based on the above results it can be concluded that H2 is accepted.

Hypothesis 3: Web design has a direct influence on consumer intention to purchase online.

Based on the results of hypothesis testing using PLS analysis known that the original value of the sample is positive with t-statistic results worth greater than 1.96. These results indicate that the relationship between web design to purchase intention is straight and significant which means that the

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increase in web design factor will have a significant impact on the increase of purchase intention factor. Based on the above results it can be concluded that H3 is accepted.

Hypothesis 4: Consumer attitudes toward online purchases have a direct influence on consumer intention to purchase online.

Based on the results of hypothesis testing using PLS analysis known that the original value of the sample is positive with t-statistic results worth greater than 1.96. These results indicate that the relationship between consumer attitudes toward purchase intention is straight and significant which means that an increase in consumer attitudinal factors will have a significant impact on the purchase intention factor. Based on the above results it can be concluded that H4 is accepted.

The results of testing the influence of hypotheses with consumer attitudes as mediation variables are presented in the table as follows:

Results of Hypothesis Testing Indirect Influence of Trust, Risk, Web Design to Purchase Intention with **Consumer Attitudes as Mediation Variables** 

Variabel Dependen	Independent Variables	Sample Original	t-statistic	Information
Purchase Intention (Y <sub>2</sub> )	$Trust(X_1)$	0.079	1.573	Not significant
2	$Risk(X_2)$	-0.060	1.543	Not significant
	Web Design (X <sub>3</sub> )	0.133	1.966	Significant

Source: Primary data processed, 2015

Information:

Significant when the value of t-statistic> 1.96 Mediation Variables: Consumer Attitudes

Hypothesis 5: Attitudes mediate the effect of trust on consumer intention to purchase online.

Based on the results of hypothesis testing by using PLS analysis known that the original value of the sample is positive with t-statistic value is smaller than 1.96. These results indicate that the relationship between Turst to purchase intention through consumer attitude is straight and not significant which means that the increase in trust factor will not significantly affect the purchase intention factor through consumer attitude. Based on the above results it can be concluded that H5 is rejected.

Hypothesis 6: Attitudes mediate the effect of risk (risk) on consumer interest to buy (consumer intention to purchase) online.

Based on the result of hypothesis testing by using PLS analysis it is known that the original value of the sample is negative with t-statistic value is smaller than 1.96. These results suggest that the relationship between purchasing intention through consumer attitudes is reversed and insignificant which means that an increase in risk factors will not have a significant impact on purchasing intention reduction through consumer attitudes. Based on the above results it can be concluded that H6 rejected.

Hypothesis 7: Attitude to mediate the influence of web design on consumer interest to buy (consumer intention to purchase) online.

Based on the results of hypothesis testing by using PLS analysis known that the original value of the sample is positive with t-statistic results worth greater than 1.96. These results indicate that the relationship between web design on purchasing intentions through consumer attitudes is straight and significant which means that improvements in web design factors will have a significant impact on purchasing intention factors through consumer attitudes. Based on the above results it can be concluded that H7 accepted.

## CONCLUSIONS AND SUGGESTIONS

#### Conclusion

Trusts have an effect on purchase intention. Trust is a thing that makes consumers in deciding to transact through the internet media. Consumers feel that the seller is honest enough to transact with consumers, in addition to the belief of third parties and also the site where shopping also gives an influence on the interest of shopping through the internet.

Risk affects negatively the purchase intention. The risk is a factor that lowers consumer interest. When consumers feel that the risk of losing money, personal information will spread, and goods that come not in accordance with the expected then automatically it will reduce consumer interest to buy online.

Web design has an effect on purchase intention. A website must be designed with all features planned, artistic, coherent, and also useful in an attempt to influence a user's affective condition and to increase online visits by consumers or increase purchase intentions.

Attitudes affect the purchase intention. Consumer attitudes toward purchasing through the internet can be a positive attitude or vice versa in the form of a negative attitude. The positive attitude shown by consumers has an effect on the increase of intention to purchase online.

Attitudes do not mediate in the influence of trust and risk on purchase intention, but consumer attitudes mediate website design to purchase intention. The result of the research shows that for trust and risk variable the result shows there is little indirect effect to purchase intention through attitude, although direct result indicates that trust and risk have direct effect to purchase intention. In contrast to the above two variables, the website design variables actually indicate a large indirect effect on purchase intention through consumer attitudes. Although statistically, the value between t-arithmetic and t-table is very close.

## **Suggestion**

Trust proves to be the variable that determines a consumer will be involved in the buying process online. Businesses must maintain consumer confidence in the business community. Honest information about the condition of goods and also cooperation with third parties such as website appraisal sites can help businesses to grow consumer confidence. In addition, the use of testimonials can also help foster consumer confidence. With testimonials, consumers feel confident that they are in touch with a real businessperson.

Businesses must be able to minimize the risks. Risk proved to reduce consumer intention to purchase online. Businesses can use official and trustworthy payment facilities to minimize consumer concerns about losing money. In addition, business people can also use a reliable delivery service so that the risk of goods that come not on time can be minimized.

Website design proves to be a factor that determines consumer intention to purchase online. Businesses should be able to present a website where consumers find it easy if they want to use the site. However, if the seller does not have a separate website or a merchant's sales venue is still incorporated with other websites, the seller may use an attractive design to attract consumers.

This research was conducted on Malang city community and still consumer in general. In future research can do research where the consumer is more specific, it means not only those who buy the product in general but already lead to certain products such as books, fashion products or even electronic equipment. In future research can be more focused on exploring variables that affect the attitude and purchase intention. The researchers can then add variables such as price, perceived benefit, culture, product type or other variables in the research.

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