

## **The Influence of Website Design, E-Trust, and E-Service Quality on Online Purchase Decision**

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### **Abstract**

The purpose of this research is to analyze the influence of website design, e-trust and e-service quality either partially or simultaneously to purchase decision. The sample was 86 customers of the coffee shop Janji Jiwa at Tembalang Semarang. The analysis techniques used were multiple linear regression with least squares equation, the coefficient of determination, and t-statistics and F statistics for testing the hypotheses partially and simultaneously using 5% level of significance. The results indicate that website design, e-trust, and e-service quality have a significant effect on online purchase decisions either partially or simultaneously.

**Keywords:** website design, e-trust, e-service quality and purchase decision

### **INTRODUCTION**

In the digital era, online shopping has become a new habit of the people in Indonesia and the world. Advanced digital information technology that is very helpful in making transactions online stimulates this habit. Online shopping is highly preferable because it is more efficient in terms of time, effort, and cost, and effective in finding products needed. As a result, online shopping grows very fast in Indonesia. It is also experienced by coffee shops.

Drinking coffee has been developing in Indonesia for long time since the first enactment of forced cultivation by the Dutch government. Drinking coffee was a habit initially carried out by the Dutch government and then was enjoyed by Indonesians. Currently, people are more aware of various types of coffee available in Indonesia. Many coffee bean sellers in several marketplaces are categorized as MSMEs and sell unpopular coffee brands in the market. However, many large coffee producers selling offline have also begun to dominate

the online markets in this digital era. They easily gain buyers' trust and loyalty. It is interesting to study factors affecting consumers to purchase coffee online.

Online transactions are advanced due to information technology and many are intensely using online transactions these days. Online transactions have increased significantly and the number of online shoppers continues to grow each year along with the increased number of online stores. Even though this creates a fierce level of competition, online stores in Indonesia has a high opportunity to grow in the future. An online store owner is expected to understand the condition and can meet online consumers' wants (Ganguly et al., 2010).

Previously, online business was not attractive since many people did not have trust on online transaction and thus are not sure to purchase online. Prospective buyers must have trust on the information on the website offered by the seller since they cannot observe directly the quality of the products offered on the website (Kooli et al., 2018).

Online application system plays an important role in the success of an online business. Therefore, the better the application system, the higher quality the application device arranged in the system. Consulting services offered by online shops influence consumer assessment on online business. It is centered on desires to provide an accurate system overcoming problems experienced by consumers. Online consumer assessment is an assessment on the advantages of a comprehensive system given by consumers. Online consumer may give rating on their assessment that are influenced by website design indicating a quality tool composed in the system. Website design and consulting services begin with consumer need and end with consumer assessment (Ahmad et al., 2017).

Regardless the quality of the e-commerce system, there must be a potential risk. The research of Kooli et al., (2018) concluded that among many factors that can influence transactions of e-commerce, trust is proven to be the key factor. In many studies, researchers

often argue that trust is one of the conditions for the success of e-commerce because hesitant consumers will purchase only if they trust the seller. Consumer trust is considerably more important in an electronic transaction than in a traditional transaction because of the characteristics of the internet transactions that are invisible, indefinite, and daily (Ahmad et al., 2018).

Trusted transaction process is the key success for an internet-based business and thus an atmosphere that can make potential consumers feel comfortable and confident to make transactions online must be built (Kooli et al., 2018). Considering importance of trust in e-commerce transactions, it is thus necessary to identify factors that affect the formation of consumers' trust for transacting over the internet. In addition, the effect of a level of trust on consumers' online purchase decision is necessary to be identified.

E-service quality is defined as the extent to which the website can facilitate consumer's activities which include purchasing and delivering products and services efficiently and effectively. It enables consumers to transact more efficiently. Similarly, information availability and inclusiveness as well as ease of making transactions are the considerations of a consumer in choosing the services of a company. Ahmad et al, (2018) stated that e-service quality can improve purchase decision.

The purpose of this research is to analyze the influence of website design, e-trust and e-service quality on the decision to purchase coffee online.

## **LITERATURE REVIEW**

Kotler and Armstrong (2011) stated that online purchase decision is a stage of the decision process where consumer make a product purchase. Here, consumer evaluates brands in a collection of choices and form an intention to buy the most preferred one (Kotler & Keller, 2012). According to Kooli et al., (2018), online purchase decision is selection of two or more

alternatives available from online buying. This means that a person can only decide if several options are available. In other words, online purchase decision is the selection of various alternatives to meet needs through purchasing a product online by analyzing several stages of problem-solving. Once a need is identified, a consumer will try to find information on products or services that can meet their need, evaluates the alternatives available for them, and select the most preferred one to be bought. Many factors come into consumer's considerations when evaluating the alternatives. Producers or sellers have to create things that can affect the consumer's evaluation during making the decision to purchase and makes the consumer to purchase their products or services.

Quality of website design defined as how well the design of a website can meet the visitors' preferences to the website (Teklehaimanot & Sharma, 2016) offers one potential way to position a company's products and services online (Kotler & Keller, 2009). Previous research suggests that quality of the website can increase consumer satisfaction with the website and the company. A website that has a good appearance, can be easily understood and used by consumers can reflect that the company also has a good reputation. Sam and Tahir (2019) noted the aspects in creating website design quality cover information quality, access speed, visual appeal, and the level of interactivity.

Consumers will be confident toward an online transaction process when they think they get certainty from the seller who is considerably willing and able to fulfill their obligations. A consumer who has willingness to rely on a trustworthy seller means that the consumer has trust on the seller (Prabowo et al., 2014). Consumers will buy from the seller they trust. Ghane et al (2019) put forward a definition of trust as the existence of commitments between two parties involved in the relationship that will provide benefits for both. The belief of one party towards another will give rise to interactive behavior that will strengthen and

helps maintaining the relationship. Such behavior will increase length of the relationship since commitment within the relationship will be strengthened.

E-service is a service provided electronically via the internet and it can help solving problems, tasks, or transactions (Hoffman et al., 2006). Quality of e-service termed as e-service quality (e-servqual) indicates the level at which the website can facilitate efficiently and effectively purchases, sales, and deliveries of products and services (Ahmad et al., 2017). Furthermore, Ahmad et al. (2017) noted 10 dimensions of e-servqual, which consist of reliability, responsiveness, competence, access, politeness, communication, credibility, form, security, and understanding consumer needs. E-service quality can improve purchase decision (Ahmad et al., 2018) because it enables consumers to transact online more efficiently.

## **METHOD**

The population is the collection of all elements in the form of events, things, or people having the same characteristics that are the focus of a researcher's attention (Ghozali, 2016). The population of this study is all consumers of the Janji Jiwa coffee operating in Tembalang Semarang.

Purposive sampling technique, a technique for determining samples based on particular criteria (Ghozali, 2016), was used in this study. Only consumers who have made online purchases more than twice a month are selected for this research. The number of sample was dependent on the number of consumers that can be obtained during the predetermined time of distribution of the questionnaire. The number of samples obtained in a month was 86 respondents whose questionnaire is complete and valid. According to Hair et al. (1998), the minimum number of samples used for regression analysis is 15 to 20 times the number of variables. The minimum number of samples of this study that have four variables is 60 to 80

respondents. Thus, the 86 respondents obtained are acceptable as they meet the minimum number required.

The respondents were asked their perception on purchase decision, website design quality, trust, and e-service in 5-point Likert with 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree to the statement. Regression analysis is used to analyze the influence of website design quality, trust, and e-service on purchase decision.

**RESULTS AND DISCUSSION**

**Respondents’ Characteristics and Online Purchase Behavior**

Demographic characteristics of the respondents are presented in table 1. Majority of the respondents is female (65.12%), have education senior high school and higher degree (100%), students (75.58%) and have monthly income of 2-10 million rupiah (86.05%).

**Table 1. Demographic Characteristics of the Respondents**

	Item	Frequency	Percentage
Gender	Male	30	34.88
	Female	56	65.12
Education Background	Junior High School	0	0.00
	Senior High School	47	54.65
	Diploma	23	26.74
	Bachelor	10	11.63
	Graduate	6	6.98
Occupation	Student	65	75.58
	Public Official	6	6.98
	Soldier/Police Officer	0	0.00
	Private Employees	15	17.44
	Self-employed	0	0.00
Monthly Income	Others	0	0.00
	< 2 million	12	13.95
	2 million to 5 million	56	65.12
	5 million to 10 million	18	20.93
	> 10 million	0	0.00

The characteristics support the previous studies. Coffee shop customers are usually the middle class and visiting coffee shop is a lifestyle to meet their physiological needs (Ujang, 2014). Moreover, Ujang (2014) stated that occupation has an impact on purchasing power towards a product. This relates to income that is the main factor indicating the ability of consumers to buy or pay for a product or service (Kurniawan et al, 2015).

Table 2 presents the respondents behavior in visiting the website of Janji Jiwa Coffee. The respondents visited the website mostly during noon and afternoon and on week days (only few visit the website on Sunday). Moreover, those often visit the website during the identified time is female (44.64%) and 55.36% of them visit the website of Janji Jiwa coffee two to five times a month.

**Table1. The Respondents Behavior in Visiting the Website of Janji Jiwa Coffee**

	Item	Frequency	Percentage
Visiting Time to the Website	Morning (07.00 - 10.00)	9	10,47
	Noon (12.00 - 15.00)	35	40.70
	Afternoon (17.00 - 19.00)	34	39.53
	Night (above 20:00)	8	9.30
Days of Visiting the Website	Monday - Tuesday	15	17.44
	Wednesday - Thursday	27	31.40
	Friday - Saturday	38	44.19
	Sunday	6	6.98
Source for Knowing the Website	Friend	9	10.47
	Advertisement	5	5.81
	Social Media	42	48.84
	Outlet	30	34.88
Person Accompanying to Visit the Website	College friends	48	55.81
	Workmates	12	13.95
	Family	26	30.23

As many as 48.84 percent of the respondents knew the Janji Jiwa coffee from social media. There are 55.81 percent of respondents often made purchases online together with friends. This illustrates that the respondents are dominated by the generation millennial who

are usually attached to the use of strings and the internet at all times and hanging out together has become part of their lifestyle (Garnida, 2020).

In addition to purchase online, all respondents stated that they also purchased offline. As many as 52.33% said that the advantage of buying offline was faster. Table 3 shows that non-coffee are the products purchased online most often. This is possibly because the Janji Jiwa coffee website displays more non-coffee products such as tumblers and other accessories.

**Table23. The Respondents Purchase Behavior on Janji Jiwa Coffee**

	Item	Frequency	Percentage
Most Frequently Purchased Products Online	Coffee	42	48.84
	Non Coffee	44	51.16
	Snacks	0	0.00
Sizes of Beverage Frequently Purchased Online	Regular	34	39.53
	Large	7	8.14
	Family Pack	45	52.33

The respondents prefer to buy family pack with a dominant female consumer of 66.07 percent. This possibly is caused by the website of Janji Jiwa Coffee was managed in collaboration with a third-party applications for ordering drinks online.

**Regression Analysis**

Coefficient of determination can be to identify goodness of the regression model since it indicates variability of the independent variable that can be explained by the dependent variables in the model. Adjusted R *square* ( $R^2$ ) results in 0.478 (table 4), which means that 47.8% decision to purchase Janji Jiwa coffee online is influenced by website design, e-trust, and e-service quality. In other words, there are other variables excluded in the model that influence the decision to purchase Janji Jiwa coffee online by as much as 52.2%. Thus, the regression model is considerably acceptable.



**Table 4. Coefficient of Determination Analysis**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.705	0.497	0.478	0.83867	1.869

The F test intended to prove significance of the effect of web design, e-trust, and e-service quality on online purchase decision reveals that web design, e-trust, and e-service quality simultaneously influence decision to purchase Janji Jiwa coffee online. This is indicated by the F value of 26.967 and sig 0.000 (table 5). Thus, the model can be analyzed further using regression analysis.

**Table 5. The Result of F Test**

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	56,904	3	18,968	26,967	0,000 <sup>b</sup>
Residual	57,676	82	0,703		
Total	114,580	85			

a. Dependent Variable: Online Purchase Decision

b. Predictors: (Constant), E-Service Quality, Web Design, dan E-Trust

As can be seen from table 6, the regression coefficients of all independent variables are positive. This indicates that better web design, e-trust, and e-service quality increase decision to purchase online. Accordingly, web design is proven to give the biggest effect on online purchase decision among other independent variables (the coefficient of 0.358). Web design is also the only variable that give significant effect on the decision to purchase online (sig 0.001). Meanwhile, e-trust and e-service quality having sig. 0.049 and 0.048 respectively can be considered significant even though their significance value is nearly on the threshold 0.05.

**Table 4. The Regression Result**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	0.562	0.298		1.883	0.063
Web design	0.401	0.121	0.358	3.305	0.001
e-Trust	0.160	0.081	0.140	1.975	0.049
<i>e-Service quality</i>	0.334	0.166	0.303	2.012	0.048

Dependent Variable: online purchase decision

**Discussion**

Online purchasing decisions tend to be influenced by how often a person accesses the internet. Knowledge of strings, the internet, and the frequency and duration of use of the internet tends to affect consumer behavior because it makes them able to make purchases online (Winatha et al, 2014).

The quality of website design includes artistic, creating menu links that are quite effective that can affect the appearance, taste, and function of the product following the expectations and needs of consumers. The website can also be used as a means of promoting products and services that are quite effective to increase their sales volume. This can also be applied to the Kopi Janji Jiwa website with promotions at certain times, especially at 12.00 – 19.00 which is the most frequently used time by consumers to access the Kopi Janji Jiwa website. Thus, it is expected that 29.07 percent of consumers whose nominal purchases are < Rp.25,000 can increase their purchase volume. A website is an information and promotional media that has proven to be quite in demand in addition to other information media because of the very interactive and attractive nature of the website with a global reach and presents up-to-date information.

I believe online services in e-trust are the main things that consumers consider when accessing a website before making an online transaction. The integrity of online services to

websites lies in the popularity and quality of the information presented and this is in line with the results of this study that 48.84 percent of respondents know the Kopi Janji Jiwa website from social media.

Improving the quality of online purchase services in e-service quality is more concerned with making consumers able to get more value in the form of efficient costs and time when making purchases online. This is because service itself is an action taken by business owners to meet the needs of their consumers. The better the services provided, the more it will improve the relationship between business owners and consumers. Speed in serving in the coffee shop business, especially in terms of time making and delivering orders, will be able to increase consumer satisfaction. E-service quality has an important role to increase consumer loyalty so that consumers are expected to make repurchases. By increasing the e-service quality of the Janji Jiwa coffee website, it will also have an impact on increasing the number of consumer visits to the Kopi Janji Jiwa website to above five times a month and increasing the sales volume of coffee products that are still low on the Kopi Janji Jiwa website, which is 48.84 percent.

This condition is also illustrated that 62.79 percent of respondents, dominated by 76.67 percent, are men who visit the Kopi Janji Jiwa website two to five times a month.

## **CONCLUSION AND IMPLICATIONS**

The results indicate that website design has a bigger influence on online purchase decision compared to e-trust and e-service quality. However, simultaneously website design, e-trust, and e-service quality have a significant effect on online purchase decision.

Since the model contributes only 47.8%, it can thus be interpreted that there may be other variables that influence the decision to purchase Janji Jiwa Coffee online. Future research can identify other variables that influence online purchase decisions. The suggested

variables are customer loyalty as it can be influenced by e-service quality, e-satisfaction, and e-trust (Nurayni, D, et al,2019), and lifestyle orientation as consumer lifestyle orientation behavior has an important role in the process of stimulating online purchase decisions (Ashoer, et al,2019). In addition, for future research, it is necessary to use comparisons to find out the position of Janji Jiwa Coffee with its competitors in improving purchasing decisions, by researching Kopi Kenangan, Kopi Lain Hati, and so on.

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