

# How Website Characteristics Give Impact to Customer Loyalty on Online Stores Through Customer Satisfaction

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**Abstract**—The purpose of this study is to determine the effect of Website Characteristics on customer satisfaction and impact on customer loyalty in the online store. The population of this research is the first-grade student of Diploma 4 Management Accounting in State Polytechnic of Malang. Using a purposive sampling method dan solving formula 138 samples were collected. In this research, the analysis technique used was linear regression namely path analysis. By using 5% of the significance level, some conclusions can be obtained from this research. The constant value obtained significance (P) if 0.000 is smaller than 0.05. The conclusion that can be drawn based on the result of hypothesis testing on the F-test is that the design of the site, informative, security, and communication have a partially significant effect on the customer's satisfaction, but the variable of shopping convenience has no significant effect partially on the customer's satisfaction. Besides that, the design of the site, informative, security, and communication have a partially significant effect on the customer's loyalty, but the variable of shopping convenience has no significant effect partially on the influence on customer loyalty.

**Keywords:** *Website Characteristic, customer satisfaction, customer loyalty, online business*

## I. INTRODUCTION

Online business today shows a very rapid development. To be able to win the competition with other parties, one of the conditions is to create satisfied customers who believe in the product being sold. The way to be done to be able to make consumers satisfied and trust are to create good website characteristics.

The growth of the electronic commerce sector (e-Commerce) is quite good in the last year that makes this sector still a prima donna of investors in 2018. Based on data from the Investment Coordinating Board (BKPM), the value of an investment in the e-Commerce sector in 2017 reached more than the US \$ 5 billion, making it one of the most strategic sectors of the economy. Seeing this growth Shopback as an eCommerce cashback platform analyzes some things that will become the trend of e-Commerce sector in 2018, that is, more and more offline merchants are switching to online, Mobile wallet is increasingly widespread, the same day delivery service becomes the main choice, sellers on Instagram are

switching to online stores and online ticket sales are increasing [1].

Online shopping is a form of the transaction using electronic devices that allow consumers to buy goods or services from the seller via the internet. Other names of the activities are e-web, e-shop, e-Toko, web-shop, web-store, online store, and virtual store. Currently, online shopping is getting more sophisticated because shopping can be done by using a communication tool such as a cellphone.

The success of a Retail is no longer all about building physics, as this is evidenced by an increase in retailers offering online storefronts to consumers. With the growth of online shopping, then the store will have a great opportunity to meet the market demand from various regions both domestically and abroad [2].

Characteristics of the website are defined as the attribute that consumers consider in assessing the website of an online store. Website characteristics are measured using five dimensions [3]:

- Shopping Convenience
- Site Design
- Informative
- Security
- Communication

Website design has been studied from a usability perspective and website usability defines as the ease with which users can navigate through a site in Luo [4]. Website download speeds affect usability, as does how information is structured and integrated with the graphic design layout. Moreover, a well-designed website signals the retailer's ability to consumers: online purchases are higher at a high-investment website than at a low-investment website [5]. According to Liu & Arnett (2008) in Pong-Ming [6], website quality is a platform of Information Technology, which attains the effectiveness of the website (Lin in 2008). While according to Chen, Zhang, Huang, 2010 in Pong-Ming [6] A well-established website is attracting, ease of use, enhancing the

users' skill and building up long term relationships with buyers and sellers.

*A. Media for Online Shop*

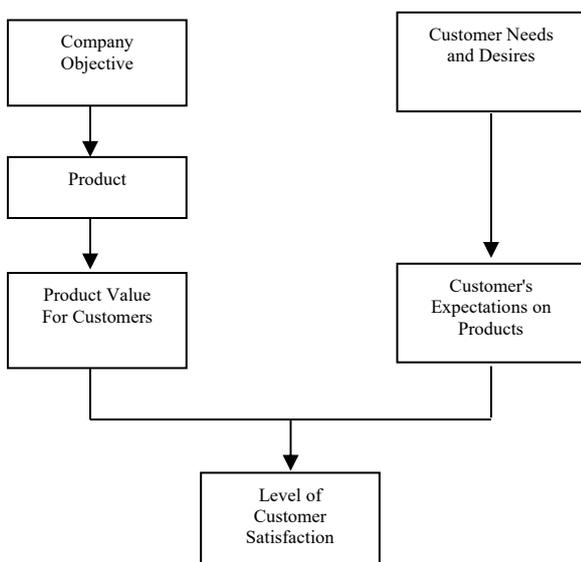
Online business does have a medium for selling and promotion that is very diverse. Starting from the website, social media to business networking. During this time people are still hesitant to do business online because they fear not having a safe selling media and a lot of promotional media. Though online media it is very easy to use and has a very wide range. Online media allows us to do anything very easily and quickly, including for business matters. Media that is often used for Online Shop are:

- Facebook
- Instagram
- Kaskus
- Blog
- Situs Web

*B. Consumers' Satisfaction*

Some experts define customer satisfaction/ dissatisfaction. Engel, et.al in Tjiptono [7] stated that customer satisfaction is a post-purchase evaluation in which the chosen alternative is at least equal or exceeds the customer's expectation, while dissatisfaction occurs when outcomes do not meet expectations. Meanwhile, Wilkie in Tjiptono [7] defined as an emotional response on the evaluation of the consumption experience of a product or service. Kotler in Tjiptono [7] asserted that customer satisfaction is the level of a person after comparing the performance (outcome) that he felt compared to his expectations.

The concept of customer satisfaction can be seen in the picture below:



Source: Tjiptono [7].

Fig. 1. Customer satisfaction concept.

Method to measure customer satisfaction according to Kotler in Tjiptono [7] i.e.:

- Complaints and suggestions system
- Customer satisfaction survey
- Stealth Shopping
- Missing customer analysis.

*C. Customer Loyalty*

According to Oliver (1996) in Huriyati [8] express the definition of customer loyalty is "Customer Loyalty is deeply held commitment to rebuy or re-pratone a preferred product or service consistently in the future, despite situational influences and marketing efforts having the potential to cause switching behavior". From the above definition, it can be seen that loyalty is the commitment of customers to stay in-depth to re-purchase selected products/services consistently in the future, even though the influence of the situation and marketing efforts have the potential to cause behavioral changes.

According to Griffin (2002) in Huriyati [8] stated the benefits obtained by the company if it has loyal customers, among others:

- Able to reduce marketing costs (because the cost to attract new customers is more expensive).
- Able to reduce transaction costs.
- Able to reduce consumer turnover costs (due to fewer consumer replacements).
- Able to increase cross-sales, which will enlarge the company's market share.
- Encouraging more positive word of mouth, assuming that loyal customers also mean they are satisfied.
- Able to reduce the cost of failure (such as replacement costs).

*D. Characteristics of Customer Loyalty*

Loyal customers are important assets for the company, this can be seen from the characteristics they have, as revealed by Griffin (2002) in Huriyati [8], loyal customers have the following characteristics:

- Makes regular repeat purchases
- Purchase across product and service lines
- Refers other
- Demonstrates an immunity to the full of the competition).

*E. Conceptual Framework*

Model of relationship between characteristics of the website with customer satisfaction can be described as a research model as follows:

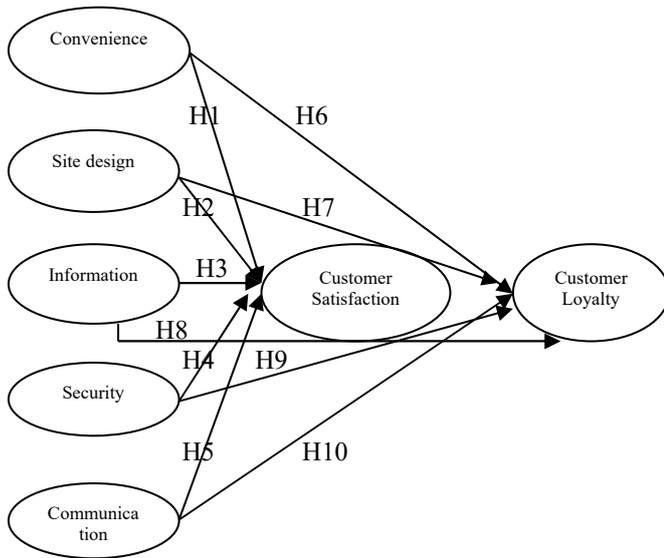


Fig. 2. Research model.

**F. Hypothesis**

As for the hypothesis in this study, they are as follows:

- H1: Convenience of online retail shopping will be a positive and significant impact on customer satisfaction.
- H2: Design of online retail sites will have a positive and significant impact on customer satisfaction.
- H3: Informative online retailing will have a positive and significant impact on customer satisfaction.
- H4: Online retail security will have a positive and significant impact on customer satisfaction.
- H5: Online retail business communications have a positive and significant impact on customer satisfaction.
- H6: Convenience of online retail shopping will be a positive and significant impact on customer loyalty.
- H7: The design of online retail sites will have a positive and significant impact on customer loyalty.
- H8: Informative online retailing will have a positive and significant impact on customer loyalty.
- H9: Online retail security will have a positive and significant impact on customer loyalty.
- H10: Online retail business communications have a positive and significant impact on customer loyalty.

**II. RESEARCH METHOD**

Based on the research objectives to be achieved, this type of research is explanatory research, which according to Sugiyono [9] explanatory research is research that highlights the relationship between research variables and test hypotheses that have been formulated previously. The explanation to be studied is an explanation like associative.

According to Sugiyono [10] population is a generalization region consisting of objects/subjects that have certain qualities and characteristics set by the researchers to be studied and then drawn conclusions. Meanwhile, according to Arikunto [11] population is the overall subject of research. As for the population in this study is a Level 1 Student of Accounting Management Department Politeknik Negeri Malang amounted to 210 students.

In this study, the sampling unit was not selected by chance but using purposive sampling. The selection of purposive sampling was because the population would be considered heterogeneous according to a characteristic. The criteria used in this study are consumers who have made online purchases more than once. Sampling was done using Slovin formula [12] follows:

$$n = \frac{N}{1 + N(e)^2} \tag{1}$$

Note:

n = Total Sample

N = Total Population

e = Tolerance Limit of Error

From the calculation result by using Slovin formula obtained the number of samples as many as 138 students who meet the criteria determined.

The method used to find the data used in this study was conducted by questionnaire. The questionnaire is a data collection technique that is done by giving a set of questions or written statements to the respondent to be answered. One of the most commonly used ways of determining scores is by using a Likert scale [13].

**A. Classic Assumption Test**

There are four classical assumptions [14] :

- Normality Test
- Heterosdacity Test
- Autocorrelation Test
- Multicollinearity Test

**B. Data Analysis Technique**

According to Ghozali [14], *path analysis* is an extension of multiple linear regression analysis, or path analysis is the use of regression analysis to estimate the causality relationship between variables that have been predetermined based on theory. This procedure can estimate the coefficients of several linear structural equations that represent hypothesized causal relationships. The causal relationship system includes two types of variables, namely independent variables or causal variables and dependent variables or effect variables. In contrast to the regression equation where the effect of the independent variable on the dependent variable is only in the form of direct effect, in the linear structural equation, the effect of the independent variable on the dependent variable can be in

the form of direct and indirect effects. The indirect effect of an independent variable on a dependent variable is through another variable called *the intervening variable*.

### III. RESULTS AND DISCUSSION

#### A. Results

1) *Classic assumption test*, Before carrying out multiple regression analysis, it is necessary to test the data assumptions, namely 4 classic assumptions where the results obtained that all four classic assumption tests meet.

2) *Interpretation of path analysis results (path analysis)*, The hypothesis is a temporary answer to the problem that has been formulated. The truth of the hypothesis must be tested in advance through scientific evidence to obtain the real truth.

About the process of data analysis, one thing that becomes the foundation is the analysis model used in research. Based on the design that has been determined in the previous chapter, the technical analysis in this study uses the technique of part analysis regression in testing the path analysis. Then the data analysis was carried out with the help of a computer with SPSS release 18 package program for windows.

Path analysis was carried out with two multiple regression tests to see the effect of shopping convenience (X1), site design (X2), informative (X3), security (X4), communication (X5) on consumer satisfaction (Z), and to see the effect of shopping convenience (X1), site design (X2), informative (X3), security (X4), communication (X5), customer satisfaction (Z) on consumer loyalty (Y).

3) *The direct effect of shopping convenience (X1), site design (X2), informative (X3), security (X4), communication (X5) on consumer satisfaction (Z)*, The formulation of the hypothesis proposed in this study reads: There is a direct effect between shopping convenience (X1), site design (X2), informative (X3), security (X4), communication (X5) on consumer satisfaction (Z).

TABLE I. RESULTS OF DIRECT EFFECT ANALYSIS OF SHOPPING CONVENIENCE (X1), SITE DESIGN (X2), INFORMATIVE (X3), SECURITY (X4), COMMUNICATION (X5) ON CONSUMER SATISFACTION (Z)

| Variable           | Regression coefficient (b)      | Std. Error (B) | Beta (β) | t <sub>count</sub> | Sig.  | Note            |
|--------------------|---------------------------------|----------------|----------|--------------------|-------|-----------------|
| X1                 | 0.018                           | 0.039          | 0.035    | 0.470              | 0.639 | Not significant |
| X2                 | 0.112                           | 0.053          | 0.195    | 2.116              | 0.036 | Significant     |
| X3                 | 0.174                           | 0.074          | 0.216    | 2.366              | 0.019 | Significant     |
| X4                 | 0.091                           | 0.040          | 0.193    | 2.290              | 0.024 | Significant     |
| X5                 | 0.149                           | 0.066          | 0.194    | 2.256              | 0.026 | Significant     |
| Dependent variable | = consumer satisfaction (Z)     |                |          |                    |       |                 |
| R Square           | = 0,440                         |                |          |                    |       |                 |
| e1                 | = 1- R square = 1-0.440 = 0.560 |                |          |                    |       |                 |

From that table shopping convenience variable (X<sub>1</sub>), Site design (X<sub>2</sub>), Informative (X<sub>3</sub>), Security (X<sub>4</sub>), and Communication (X<sub>5</sub>) indicates a significant value of significance of 0.639, 0.036, 0.019, 0.024, and 0.026.

Thus it can be seen that Site design (X<sub>2</sub>), Informative (X<sub>3</sub>), Security (X<sub>4</sub>), and Communication (X<sub>5</sub>) has significant direct with customer satisfaction, because significance value smaller than alpha 0.05, but shopping convenience variable (X<sub>1</sub>) with significance value 0.639 is bigger than 0.05, it showed that shopping convenience variable (X1) has not significance direct to customer satisfaction.

4) *Direct Effect of shopping convenience (X1), site design (X2), informative (X3), security (X4), communication (X5), and customer satisfaction (Z) on consumer loyalty (Y)*, The hypothesis formulation proposed in this study reads: There is a direct effect between shopping convenience (X1), site design (X2), informative (X3), security (X4), communication (X5), and consumer satisfaction (Z) on consumer loyalty (Y).

TABLE II. RESULTS OF DIRECT EFFECT ANALYSIS OF SHOPPING CONVENIENCE (X1), SITE DESIGN (X2), INFORMATIVE (X3), SECURITY (X4), COMMUNICATION (X5), AND CUSTOMER SATISFACTION (Z) ON CONSUMER LOYALTY (Y)

| Variable           | Regression coefficient (b)      | Std. Error (B) | Beta (β) | t <sub>count</sub> | Sig.  | Note            |
|--------------------|---------------------------------|----------------|----------|--------------------|-------|-----------------|
| X1                 | -0.136                          | 0.071          | -0.120   | -1.928             | 0.056 | Not significant |
| X2                 | 0.229                           | 0.097          | 0.185    | 2.371              | 0.019 | Significant     |
| X3                 | 0.400                           | 0.136          | 0.228    | 2.946              | 0.004 | Significant     |
| X4                 | 0.156                           | 0.073          | 0.153    | 2.149              | 0.033 | Significant     |
| X5                 | 0.403                           | 0.122          | 0.241    | 3.318              | 0.001 | Significant     |
| Z                  | 0.508                           | 0.157          | 0.234    | 3.236              | 0.002 | Significant     |
| Dependent variable | = consumer loyalty (Y)          |                |          |                    |       |                 |
| R Square           | = 0,617                         |                |          |                    |       |                 |
| e2                 | = 1- R square = 1-0.617 = 0.383 |                |          |                    |       |                 |

From that table shopping convenience variable (X<sub>1</sub>), Site design (X<sub>2</sub>), Informative (X<sub>3</sub>), Security (X<sub>4</sub>), Communication (X<sub>5</sub>), and satisfaction (Z) indicates a significant value of significance of 0.056, 0.019, 0.004, 0.033, 0.001, and 0.002.

Thus it can be seen that Site design (X<sub>2</sub>), Informative (X<sub>3</sub>), Security (X<sub>4</sub>), and Communication (X<sub>5</sub>) has significant direct with customer loyalty, because significance value smaller than alpha 0.05, but shopping convenience variable (X<sub>1</sub>) with significance value 0.056 is bigger than 0.05, it showed that shopping convenience variable (X1) has not significance direct to customer loyalty.

5) *The indirect effect of shopping convenience (X1), site design (X2), informative (X3), security (X4), communication (X5), to consumer loyalty (Y) through customer satisfaction (Z)*. After knowing the direct effect of each independent variable on the dependent variable both the first and second regression equation models, then the indirect effect of shopping convenience (X1), site design (X2), informative (X3), security (X4), and communication (X5), to consumer loyalty (Y) through consumer satisfaction (Z).

Based on the results of the path analysis that has been done, the indirect effect of site design (X2), informative (X3), security (X4), and communication (X5), to consumer loyalty (Y) through consumer satisfaction (Z), there is a significant

indirect effect. But shopping convenience (X1), there is no significant indirect effect on consumer loyalty (Y).

### *B. Discussion*

The shopping Convenience Variable has not a positive and significant influence on the customer's satisfaction in the online store. These results indicate that Shopping convenience variables not suitable for consumer expectations so the consumer will not satisfaction in online shopping. The results of this study are by research conducted by Rahadi [15] entitled *Influence of Website Characteristics Against Customer Satisfaction* gives the result that the variable of Security significantly influences customer satisfaction. The site design and communication have positive and significant on customer satisfaction. The results of this study are by research conducted by Ishak [16] entitled *Analysis of Customer Satisfaction on Online Shopping (A study on Causes (Antecedents) and Consequents (Consequents))*, which gives results that Site Design factor significantly influence customer satisfaction.

The informative variable has a positive and significant influence on customer satisfaction on online stores. These results indicate that the better the online business provides more information, providing accurate information, providing a variety of information (payments, deliveries), providing information well, and providing useful information, will certainly make satisfied consumers already make purchases online. This research is supported by research conducted by Alam [17] entitled *An Investigation into Antecedents of Customer Satisfaction of Online Shopping*, also yield the same conclusion that the Informative variable has a positive and significant influence on customer satisfaction. This research is supported by research conducted by Manasra [18] entitled *Investigation the Impact of Website Quality on Consumers' Satisfaction in the Jordanian Telecommunication Sector*.

The security variable has a positive and significant influence on customer satisfaction in online stores. These results indicate that the better level of Security in transactions on online stores then the consumer will be more satisfied in doing transactions through the online shop. The results of this study are by research conducted by Rahadi [15] entitled *Influence of Website Characteristics Against Customer Satisfaction* gives the result that the variable of Security significantly influences customer satisfaction. This research I also supported by Candrawati [19] entitled *Influence of Website Characteristics to Customer Satisfaction on Online Stores* give a result that the variable of Security significantly influences customer satisfaction.

The shopping Convenience Variable has not a positive and significant influence on the customer's loyalty to online stores. But the site design, communication, informative, and Security variable have a positive and significant influence on customer loyalty on online stores. The results give the meaning of the higher customers perception of an online website, it will indirectly lead to customers online repurchase intention on the online website. The quality of incomplete information on the website and the poor quality of website interaction tend to be less encouraging to the intention of customers to repurchase intentions on the website. This is because customers tend to

want to get ease in using the website, the appearance of an attractive website and the completeness of the information available in making a transaction on an online website. This research is supported by research conducted by Tirtayani [20] entitled *The effect of Perceived website Quality, E-Satisfaction, And E-Trust Towards online Repurchase Intention*.

During the research in addition to the convenience factor, Site design, Informative, Security and Communication, researchers found other factors that encourage consumers to make purchases online. These factors are the invitation of friends to make purchases online, the existence of certain moments namely Harbolnas, discounts offered, many variations of products offered to consumers is also one factor that causes consumers interested in making purchases online. Besides the distance factor, for people who live far from the shopping centers then online shopping is one way to overcome it.

## IV. CONCLUSION AND SUGGESTION

### *A. Conclusion*

The research results showed that the results of direct effect the variable site design, informative, security, and communication have a partially significant effect on the online shopping customer satisfaction, while the convenience of shopping variable is not significant. Besides that the research results showed that the results affect the variable site design, informative, security and communication have a partially significant effect on the online shopping customer loyalty, while the convenience of shopping variable is not significant.

Based on the results of the path analysis that has been done, the indirect effect of site design, informative, security, and communication, to consumer loyalty through consumer satisfaction, there is a significant indirect effect. But shopping convenience, there is no significant indirect effect on consumer loyalty.

### *B. Suggestion*

Based on the results of research and discussion it can be given suggestions as follows: 1) as perpetrators of E-Commerce should always make improvements in the service of online shopping in terms of convenience, Site design, informative, Security and Communication factors so that consumers will feel satisfied in shopping through online shopping, and also must always maintain the trust of the consumers 2) for further researchers they should use other variables other than those used in research.

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