Analysis of Website Quality, Brand Awareness on Trust and its Impact on Customer Loyalty

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Abstract - Website is one of the media campaigns that play an important role in the business world. Many large and small businesses have been using the website as a promotional media in marketing their products or service. The rise of online sales have an impact on the growing importance of the company’s website as one of the factors of competitive advantage. Website created with an attractive appearance and easy to use, so it will create brand awareness in the minds of consumers, and if consumers have been aware of the site, so it will create a trust on consumers to buy goods in online shop. Consumer trust will have an impact on customer loyalty, so that the customer is likely to make repeat purchases. The purpose of this study was to investigate the effect of Website Quality, Brand Awareness on Trust and its Impact on Consumer Loyalty in Online Shop in Bandung. Type of research is descriptive and verifiable research. The data collection techniques used are observation, questionnaire and literature study. The sampling technique used in this study is a non-probability sampling technique. Data analysis techniques used in the study is Partial Least Squares (PLS), which is one type of Structural Equation Modeling (SEM) by using software SmartPLS 3.0. The results of this study are the contributions of Website Quality (X1) and Brand Awareness (X2) directly affect on Consumer Trust (Y) simultaneously by 50.6%. The remaining 49.4% is influenced by other factors which cannot be explained in the study. Meanwhile, the contributions of Website Quality (X1), Brand Awareness (X2) and Consumer Trust (Y) that directly effects on Customer Loyalty (Z) simultaneously is 83.1%. The remaining 16.9% influenced by other factors which are not included in this research model.

Keywords: Website Quality, Brand Awareness, Consumer Trust, Consumer Loyalty, Partial Least Square

I. INTRODUCTION

Internet is becoming an alternative communication for modern society that has high demands on information needs. The development of communication technology, enables the flow of information exchange for business people and make them no longer concern about the limit, distance, time and space [1].

Internet users in Indonesia have increased significantly. The results of a survey conducted by Nielsen in 2013, states that the use of Internet in smartphones spend an average of three hours per day with various activities such as chat applications, social networking, and entertainment [2].

According to market research e-Marketer, netter population in Indonesia reached 83.7 million people in 2014. The numbers apply to anyone who accesses the Internet at least once a month it makes Indonesia is 6th ranked in the world in terms of number of internet users [3]. In 2017, e-Marketer estimates that the number of Indonesian netters will reach 112 million people, beating Japan at number 5, with growth in the number of Internet users is more sluggish.

Overall, the number of Internet users worldwide is projected to reach 3 billion people in 2015. Three years later, in 2018, estimated at 3.6 billion people on earth will be accessing the Internet, at least once every month. The internet user in developing countries such as Indonesia and India estimated grow double digits every year.

One of the applications on the internet is World Wide Web, or commonly called Website. The website is one of the applications on the internet in the form of hypertext information, where information seekers can read and browse the information virtually without being linked to a particular media. Website is one of marketing tools that can inform and promote products and services. The development of Internet has affected economic development, various purchase transactions that previously could only be done face to face, now is very easy to do with internet is called e-commerce. To support the presence of e-commerce, website is one important component, because Internet users who want to shop online will visit the website before selecting and purchasing.

Website becoming known in Indonesia in 1998, which only large companies can afford to have it. Currently, there are billions of web pages that exist in cyberspace. Most of these websites are commercial web for business and commerce. The function of the website that is not only as a promotional tool but also as an effort to increase the prestige of a company that makes a lot of entrepreneurs spending much money to have this online media.

A good website can be viewed and measured through three-dimensional quality of the website that are the quality of users that include ease of use, understand, explore, use, attractive, nice view, good competence, provide new experiences are good. Then the quality of information which include the information that is accurate, reliable, up to date, corresponding discussion topic, easy to understand, detailed, and presented in a format appropriate design. Last is quality of
the interactions that include the ability to provide security to the consumer when they do the transaction, the website has a good reputation, is able to facilitate communication, creating an emotional feeling that is more personalized, have confidence in storing personal information of users, creating a community that is more specific, keeping promises delivered.

Nowadays with the number of online sales, many websites that compete by providing an attractive display on their website, so it will create brand awareness in the minds of consumers, and if consumers have been aware of the site, so it will create consumer trust to buy products via the internet (online shop), and if during the transaction they do not have a problem then they will become a loyal customer, so that if they want to do online shopping, they will surely visit the site.

When a customer makes a purchase from an unknown vendor, they can not know the quality of goods and services offered are whether the seller are reliable or not. Trust not only depends on honesty and benevolence factors but also perceived competence. This dimension is the ability and skills perceived by the public [4].

Through the website quality strategy indicated will create brand awareness an online shop sites and impact on consumer trust and ultimately consumers will be sure to shopping and make consumers loyal to the online shop. Thus, a research investigating online shop website quality in the industry is needed.

II. WEBSITE QUALITY AND BRAND AWARENESS AS A STRATEGY TO CREATE TRUST AND INCREASE CUSTOMER LOYALTY

According to Chaffey and Smith, E-marketing is marketing online whether via websites, online ads, opt-in email, interactive kiosk, interactive TV or mobiles [5]. E-marketing makes the company closer to its customers, and be able to interact whenever and wherever the consumer is. E-marketing is more comprehensive than the e-commerce is limited to transactions between organizations with people who have an interest. While in e-marketing has included the overall process that includes in marketing.

Website Quality is one method of measuring the quality of a website based on the perception of the end user. Website Quality is a development of Service Quality which has been widely used for measuring the quality of services. Web Quality based on Quality Function Deployment (QFD).

Website Quality has been developed since 1998 and has undergone several iterations. WebQual development has reached version 4.0, the version 1.0 WebQual, WebQual only strong in information quality, its dimensions are ease of use, experience, information, communication and integration. WebQual 2.0 do repairs on interaction perspective and is a significant change Iternativ WebQual 1.0 and start to do a comparison with Servqual, tested on the domain online bookstore Amazon, Blackwells and Internet bookshop and produce that level of interactive web affect the purchase through internet [6].

Dimensions of WebQual 3.0 are web information quality (accurate, timely, reliable), web interaction quality (good reputation, safe to transact, personal data secure, will deliver as promise) site design quality (easy to navigate, attractive appearance, project a sense of competency), test conducted on some online auction domain

WebQual 4.0 is based on three research areas: quality of the information from information system, the quality of the interaction and usability of human computer interaction. Perception users consists of two parts, namely the perception of the service received (Item) and the level of expectations (ideal), a quality website can be viewed on the perceived level of service high item and the gap between perception and ideal item low.

Further research explain that according to Voss on Tarigan, Webqual more advanced for measuring the quality of website [7]. According to Loiacono states that Webqual is comprehensive website quality measurement [8]. Zviran says that Webqual is popular index calculated on the basis of user perception with three dimension [9].

As described previously, WebQual 4.0 based on three main areas, namely the quality of information, quality of interaction and usability. Barnes & Vidgen defines it as follows [10]:

A. Quality of information
The quality information includes information that is accurate, reliable information, the information is up to date, according to the information topics, easy to understand information, detail information and information presented in a format appropriate design.

B. The quality of interaction
The quality of interaction include the ability to provide a sense of security when transactions, possess a good reputation, facilitate communication, creating an emotional feeling that is more personalized, have confidence in providing personal information, is able to create a specific community, providing confidence that the pledge is to be fulfilled.

C. Quality usability
The quality of website usability including ease to learn, easy to understand, easy to search, easy to use, the attractiveness of the website, the interface is pleasant, has a good competence and provide an exciting new experience.

Besides the dimensions of WebQual 4.0 comes from many System Information Assessment, this means WebQual has a strong foundation as Servqual Parasuraman or user satisfaction models by Bailey. As was mentioned earlier that WebQual a development of Servqual, then Nikos cited from Tarigan conducted a comparison between traditional service quality (SERVQUAL) with e-service quality (WebQual), according to Nikos dimension realibility on WebQual covered on all three dimensions WebQual, responsiveness covered by the three-dimensional WebQual, assurance in Servqual covered by Notion of trust in WebQual, empathy covered by the emotional appeal on WebQual and tangible dimension on
Servqual covered in design and visual appeal, appeal on WebQual.

According to Shimp, brand awareness is a condition in which the brand name on the mind of consumers [11]. Brand awareness is a fundamental dimension of the brand equity, from the views of consumers, a brand will not have an equity if consumers are not aware on the brand. To achieve brand awareness is an important challenge for new brands, and two stages of brand awareness is the brand recognition and brand recall. The task of marketing communications is to move the brand from unaware of a brand, brand recognition, brand recall, top of mind.

Through online transactions, consumers did not experience in the physical interaction with the seller and this makes it difficult to effectively evaluate the products ordered or checking the identity of the seller. Thus, trust becomes very important factor on online shopping loyalty. Furthermore, payment is usually made by using a credit card in order to deliver goods or services purchased. It is very likely to be cheated and the product received is not as ordered [12].

For online customers, do transactions with online vendors will consider the uncertainties and risks compared to traditional sale and purchase transactions. Buyers are given little opportunity to know the quality of goods and testing of the desired product through a Web media provided by the vendor. When a customer makes a purchase from a vendor website is not known, they cannot know the quality of goods and services on offer is reasonable and reliable or not [12].

Tschannen Moran & Hoy argues that there are five dimensions that shape the trust of customers [13], namely:

- Benevolence, which is good faith and reasonable belief that a party will be protected and will not be harmed by those who believed.
- Reliability: the ability reliably to meet something that is needed by a person or group when they need.
- Competence: the ability possessed by a party in terms of skills and knowledge to meet customer needs.
- Honesty, namely the extent to which any statement or expression can be fulfilled. A statement will be considered correct if it can confirm that actually happening from the perspective of the customer and commitment to the promises are kept.
- Openness, namely openness to preach or provide needed information to the customer.

Electronic loyalty is defined as a strong psychological desire to use a particular online vendor or provider of the customer itself. On the mechanism of electronic transactions electronic loyalty is defined as the customer's favorable attitude toward an electronic business in the resulting repeat buying behavior. Consumers will be said to be loyal to a website when visiting the site continuously and making a purchase. In the sphere of online transactions, some studies suggest that trust and loyalty associated with the website design [14].

A customer can be said to be loyal to the company when the customers showed a certain buying behavior characterized by an interval based on a series of decisions. Loyalty is characterized by a situation that shows how long he uses the product accompanies the purchase of more than two times. Consumer can be said to be loyal or disloyal when consumer buying behavior shows regularly or there is a condition in which the consumer requires the purchase of at least two times in a certain time interval [15]. According to Griffin there are four attributes of loyalty, namely:

- Makes regular repeat purchase, repeatedly making purchases in a certain period.
- Purchase across product and service line, loyal customers not only buy one type of product only, but buying the product line and other services on the same business entity.
- Refers other, recommend the experience regarding products and services to other colleagues or customers from purchasing products and services from another business entity.

III. RESEARCH METHODOLOGY

This research investigates website quality strategy and brand awareness influence to customer loyalty through consumer trust. The independent variable of this research is website quality (X₁) comprising of information, service interaction, usability and overall. Brand awareness (X₂) with indicator top of mind, brand recall, brand recognition. Meanwhile the dependent variable is consumer trust (Y) comprising openness, reliability, benevolence, competence and honesty. Then loyalty (Z) comprising makes regular repeat purchase, purchase across product and service line and refers other.

Based on the aim and the variable stated above, this research is categorized as a descriptive and verifiable research. According to Zikmund descriptive study is usually structured and are specifically designed to measure the characteristics described in the research question [16]. The type of data in this study is quantitative.

Quantitative analysis is a systematic scientific research on the parts and phenomena and their relationships. The goal is to develop and use of mathematical models, theories and hypotheses associated with the phenomenon. Researchers processing quantitative data which will be processed to draw a conclusion.

The population of this research is online shop consumers in Bandung. Using Bernaolli formula the number of samples taken in this study amounted to 405 respondents. The sampling technique used in this study is a non-probability sampling technique with purposive sampling technique. Non-probability sampling is a sampling technique that does not give opportunity/ equal opportunity for each element or member of the population to be selected into the sample [17]. The data collection techniques used are observation, questionnaire and literature study. In addition, the research
applies Partial Least Square (PLS) method as the data analysis and hypothesis testing technique. PLS is used to confirm the theory by verifying the relation between the latent variables. PLS can be used to simultaneously analyze the built constructs through reflective and formative indicators which is impossible to do in SEM because of the unidentified model. According to Hair et al. stated that structural equation modeling (SEM) is a family of statistical models that seek to explain the relationship among multiple variables [18].

On Partial Least Squares (PLS) there are two tests that must be done, that are test of the outer model and inner models. Outer model or measurement model used to measure how far the indicators that can explain the latent variables. Reflective indicators tested with convergent validity, discriminant validity, cronbanch alpha and composite reliability. While the inner model or structural model used to test the effect of one variable latent with other latent variables. In other words used to test the hypothesis of a latent variable with other latent variables. Testing is done by looking at the percentage of R² for the dependent latent variable that is modeled under the influence of the independent latent variables. The stability of these estimates was tested by using t-statistics obtained through bootstrapping procedure.

IV. FINDINGS & DISCUSSIONS

Inner model test conducted to determine the relationship between constructs, significance value and R² of the research models conducted. This is done with considering the value of R² on endogenous latent variables and t-count on each exogenous latent variable to endogenous latent variables from the result of bootstrapping.

The inner models path diagram as follows:

In Figure 1, it can be seen that t-count of each exogenous latent variable to endogenous latent variables. To test the hypothesis used two-tailed test with an error rate of 5%. Then the critical value that must be met in a test of hypothesis is 1.96. If t-count greater than the critical value (1.96) it means it has a significant difference between the exogenous latent variables to endogenous latent variables [19]. Those values can be seen in Table 1 below:

<table>
<thead>
<tr>
<th>Variabel Relationship</th>
<th>t Count</th>
<th>Parameter Coefficient</th>
<th>Critical Value</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Webqual - Trust</td>
<td>20.153</td>
<td>0.555</td>
<td>1.96</td>
<td>H1 accepted</td>
</tr>
<tr>
<td>Brand - Trust</td>
<td>30.084</td>
<td>0.806</td>
<td>1.96</td>
<td>H1 accepted</td>
</tr>
<tr>
<td>Brand - Loyalty</td>
<td>14.914</td>
<td>0.710</td>
<td>1.96</td>
<td>H1 accepted</td>
</tr>
<tr>
<td>Webqual - Loyalty</td>
<td>23.744</td>
<td>0.688</td>
<td>1.96</td>
<td>H1 accepted</td>
</tr>
<tr>
<td>Trust - Loyalty</td>
<td>7.306</td>
<td>0.587</td>
<td>1.96</td>
<td>H1 accepted</td>
</tr>
</tbody>
</table>

* Source: Data Processed, 2016
Based on the results in Table I it can be seen that the hypothesis test results:

A. Hypothesis Testing 1 (Influence of WebQual and Brand Awareness to Trust). In the first hypothesis that explains the relationship WebQual and brand awareness to trust.

A direct relationship between Website Quality to trust showed H0 rejected H1 accepted significant. This is because the t-count 20.153 greater than 1.96, so Website Quality significantly influence on customer trust online shopping. The coefficient parameters of Website Quality to trust is equal to 0.555, it means Website Quality have a positive influence on trust by 0.555.

A direct relationship between brand and trust showed that H0 rejected H1 accepted. The value of t-count 30.084 greater than 1.96 so brand significantly influence on customer trust. The parameter coefficient of the influence of brand to trust amounted to 0.806, it means that Website Quality Brand Awareness have a positive influence on trust by 0.806.

B. Hypothesis Testing 2 (Influence of Webqual and brand awareness through trust to customer loyalty)

A direct relationship between Website Quality to customer loyalty showed that H0 rejected H1 accepted. The t-count is 23.744 greater than 1.96, so Website Quality significant effect on online shopping customer loyalty. The parameter coefficient of influence Website Quality on Loyalty is equal to 0.688, it means that Website Quality have a positive influence on loyalty by 0.688.

A direct relationship between the brand awareness to loyalty showed that H0 rejected H1 accepted. The t-count is 14.914 greater than 1.96, so the Brand Awareness significant effect on online shopping customer loyalty. The parameter coefficient of influence brand awareness on loyalty is equal to 0.710, it means that the brand awareness has a positive influence on loyalty by 0.710.

A direct relationship between trust to loyalty showed that H0 rejected H1 accepted. The t-count is 7.306 greater than 1.96, so the Trust significant effect on online shopping customer loyalty. The parameter coefficient of trust on loyalty effect is equal to 0.587, it means that the brand has a positive influence on loyalty by 0.587.

The First Substructure

In this model, there are two independent variables, namely the Website Quality / WebQual (X1) and Brand Awareness (X2), and the dependent variable Consumer Trust (Y). The first sub-structure equation model are as follows:

\[ Y = b_1 X_1 + b_2 X_2 + E_1 \]

Where:
- \( Y \) = Consumer Trust
- \( b_{1,2} \) = Constants (beta)
- \( X_1 \) = Website Quality (Webqual)
- \( X_2 \) = Brand Awareness
- \( E_1 \) = First Error

First Substructure:

- \( R^2 = 0.506 \)
- \( Error = 1 - R^2 = 1 - 0.506 = 0.494 = 49.4\% \)
- \( Y = 0.555 X_1 + 0.806 X_2 + 0.494 \)

TABLE II. EFFECT OF INTERVARIABLES FIRST SUBSTRUCTURE

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Influence</th>
<th>Mutual Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Webqual (X1)</td>
<td>0.555</td>
<td>0.555</td>
<td>30.80%</td>
</tr>
<tr>
<td>Brand Awareness (X2)</td>
<td>0.806</td>
<td>0.806</td>
<td>64.96%</td>
</tr>
<tr>
<td>Error</td>
<td>0.494</td>
<td>0.494</td>
<td>49.40%</td>
</tr>
</tbody>
</table>

\( Y = 0.555 X_1 + 0.806 X_2 + 0.494 \)

Based on the analysis, it provides objective information as follows:
a) The contribution of WebQual (X1), which directly affects the trust (Y) is 0.555² = 0.308 or 30.80%.

b) The contribution of Brand Awareness (X2), which directly affects the trust (Y) is 0.806² = 0.649 or 64.96%.

c) The contribution of WebQual (X1) and Brand (X2) effect simultaneously that directly affect on trust (Y) is 0.506 = 50.6%. The remaining 49.4% is influenced by other factors which can not be explained in the study.

2) The Second Substructure

In this research model, there are three independent variable/ exogenous, namely Website Quality (X1), Brand Awareness (X2) and Consumer Trust (Y). While the dependent variable/ endogenous is Consumer Loyalty (Z). The equation model of second substructure is as follows:

\[ Z = b_1 X_1 + b_2 X_2 + b_3 Y + E_2 \]

Where:
- \( Z \) = Consumer Loyalty
- \( b_{1,2,3} \) = Constants (beta)
- \( X_1 \) = Website Quality
- \( X_2 \) = Brand Awareness
- \( X_3 \) = Consumer Trust
- \( E_2 \) = Second Error

Second Substructure:
Customer Loyalty (Z) = Website Quality (X1) + Brand Awareness (X2) + Consumer Trust (Y) + Error 2

\[ Z = 0.688 X_1 + 0.710 X_2 + 0.587 Y + Error 2 \]

\( R^2 = 0.831 \)

Error = 1 – \( R^2 = 1 – 0.831 = 0.169 = 16.9% \)

\[ Z = 0.688 X_1 + 0.710 X_2 + 0.587 Y + 0.169 \]

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Influence</th>
<th>Mutual Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Webqual (X1)</td>
<td>0.688</td>
<td>0.688</td>
<td>47.33%</td>
</tr>
<tr>
<td>Brand (X2)</td>
<td>0.710</td>
<td>0.710</td>
<td>50.41%</td>
</tr>
</tbody>
</table>

Based on the analysis, it provides objective information as follows:

a. The contribution of WebQual (X1), which directly affects the Loyalty (Z) is 0.688² = 0.473 or 47.33 %.

b. The contribution of Brand Awareness (X2), which directly influence the Loyalty (Z) is 0.710² = 0.504 atau 50.41 %

c. The contribution of Trust (Y), which directly influence the Loyalty (Z) is 0.587² = 0.344 or 34.45 %

d. The contribution of WebQual (X1) and Brand (X2) effect simultaneously that directly affect on Loyalty (Z) is 0.831 = 83.1%. The remaining 16.9% is influenced by other factors which can not be explained in the study.

3) Indirect Effect

The following is a summary of the indirect effect between the independent variable (X1, X2) and dependent variable (Y, Z):

a. The Indirect Effect of Website Quality variable to Consumer Loyalty through Consumer Trust (X1, Y, Z) is 22.41%.
b. Indirect effect of Website Quality to Consumer Loyalty through Brand Awareness and Trust ($X_1, X_2, Y, Z$) is 14.74%.

c. Indirect effect of Brand Awareness to Consumer Loyalty Trust ($X_2, Y, Z$) is 33.59%.

d. Indirect effect of Brand Awareness to Consumer Loyalty through Website Quality and Trust ($X_2, X_1, Y, Z$) is 10.47%.

V. CONCLUSION & SUGGESTIONS

Based on research that has been conducted on 405 respondents, it was concluded to answer the hypothesis in this study. The contributions of Web Quality ($X_1$) and Brand Awareness ($X_2$) that directly affect on Consumer Trust ($Y$) simultaneously is 50.6%. The remaining 49.4% is influenced by other factors which can not be explained in the study.

The contributions of Web Quality ($X_1$), Brand Awareness ($X_2$) and Consumer Trust ($Y$) that directly affect on Customer Loyalty ($Z$) simultaneously is 83.1%. The remaining 16.90% influenced by other factors which cannot be explained in the study.

Based on the analysis of this study, it can be concluded that the quality of the website for online shop and brand awareness has a significant impact on consumer trust to make purchasing decisions. In addition, from this study website quality, brand awareness and consumer trust affect significantly on customer loyalty.

Hence the advice that can be given for the online shop or a company that sells products through e-commerce mechanisms, they need to consider the quality of the website and focus on creating brand awareness to their website, in order to get consumer trust and impacting their customer loyalty sustainably.

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