ANALYSIS OF THE INFLUENCE OF TECHNOLOGY ADVANCES AND E-COMMERCE WEB SERVICE AGAINST THE TRUST AND LOYALTY OF CUSTOMERS

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ABSTRACT

The research describes about the trust and loyalty of customers in the Bukalapak.com effected by rapid world online transactions or commonly referred to as an E-Commerce. E-commerce supporting factors one of which is a web or website. For that employers should know the quality of web interaction is by way of doing web quality measurement using the Webqual 4.0. In this research used an online questionnaire method against 140 respondents or Bukalapak.com customers. Then conducted an analysis descriptive for analysis to analyze the profile of the respondents, the presentation of data through tables, pie charts, quantitative analysis include the assay validity, reliability test, test of Goodness of Fit of the model and analysis of measurement SEM (Structural Equation Modeling). Results showed significant influence between the variables in three interactions influence, namely (1) technological advances against Trust (CR=3.299), (2) E-Commerce Web service against the trust (CR=3.314), and (3) the trust of customer loyalty (CR=12.299).

Keywords: Technology Advances, web service to e-commerce, Trust, Customer loyalty

1. INTRODUCTION

The advancement of technology is something that is inevitable because over the advances of science made technological advances that appear hand in hand. A country is said to go forward if you have a level of mastery of high technology (high technology). Technology advances very rapidly and continues to expand at this time creating a business competition in the world of online sites becoming so tight. The successful use of technology in the world of online supported by the model theory of the Technology Acceptance Model (TAM) is a theory as a foundation for studying and understanding the behavior of users in receiving and using information systems(Chiu et. al.) [1]. Many theories and models have been proposed over the years to explain the individuals' usage behavior towards technologies[15].

The habit of customers who want everything quickly and practically makes entrepreneurs want to expand their business by creating online sites that provide information services in various fields, especially in the business world that leads to online transaction activities. This online transaction is known as E-Commerce. Other technological advancements are the development of electronic devices that make it easier for customers or users to access the internet anywhere. Because internet users in Indonesia continue to grow, for that entrepreneurs or business people develop their activities through E-Commerce to sell or transact online.

The rapid development of e-commerce, can not be separated from the development of the internet in Indonesia, as shown in figure 1.

![Figure 1: Internet users in Indonesia](14)
With approximately 145 million internet users, Indonesia is one of the biggest online markets worldwide[14]. In June 2019, online penetration in this country it rises slightly above 50 percent. Online activities are very popular including mobile messaging and social media. The most popular social network in Indonesia is Facebook with 81 percent users. User mobile internet is experiencing double digit rate growth and currently there are more than 30 percent in between population.

The habits of customers who want everything fast and practically make the entrepreneurs want to develop its business in a way to make online sites that provide information services in various fields, especially in the business world that leads to transaction activity online [2,3] . Online transactions is known as E-Commerce. E-Commerce supporting factors one of which is a web or website. Customers on e-commerce entrepreneurs to interact with using the website. For that employers should know the quality of web interaction is used to answer the needs of its customers by way of doing web quality measurement using the Webqual 4.0 [4].

These measurements can be useful to improve services and the interaction between employers and customers. Transactions through online giving a lot of ease but still believes the rate calculated by the customer because the customer is still in doubt with the security system, the quality of the goods, the method of payment and the ability to buy and sell website in managing and selling online. If the trust customers against buying and selling these online sites are reduced there isn't even then entrepreneurs will lose the loyalty of its customers [5].

Bukalapak.com is one of Indonesia's leading online marketplace. As well as buying and selling service site provides a means of buying and selling from consumer to consumer. Anyone can open an online store at Bukalapak.com and serve shoppers from all over Indonesia as well as many units for the transaction. Thus how Bukalapak.com take advantage of current technological advances by using the internet as an opportunity to sell online that mediate between sellers and buyers so that E-Commerce web services run smoothly so that customers can trust and loyal. The goal is to know the effect of technological advances e-commerce web services to customer trust and loyalty.

2. LITERATURE REVIEW

2.1. Understanding of Technology

According [16] describes the technology of the Greek language, namely "tecnologia" which means systematic discussion to study arts and crafts. This term has the root word "techne" in ancient Greek meaning art (art), or craft (craft). From the translated meaning, technology in ancient Greek can be defined as art which produces the means of production and use. The definition is then developed into a science that is in accordance with human needs. Technology can also be interpreted as "knowledge of how to make something" or "how to do something" (knowledge of how to do something), in the sense of the ability to do something with high value, both the value of benefits with the sale value.

2.2. Indicator of Technology

This technology indicator uses the Concept of Technology Acceptance Model (TAM) developed by Davis[17,18], offering a theory as a basis for learning and understanding user behavior in receiving and using information systems [18], is according to the users adoption of computer systems depend on their behavioral intention to use, which in turn depends on attitude, consisting of two beliefs namely Perceived Ease of Use and Perceived Usefulness.

According to Celikh and Yilmaz [19], TAM consists of 6 components. The TAM component can influence consumers' buying intentions to shop online. Only 5 components of these 6 components are used in this research. The six components are:

Perceived Quality of E-Shopping. In online shopping consumers hope that a web can support them. Getting the right information about products and services is essential for consumers. There are 3 factors to evaluate the quality of a website, namely information quality, service quality and system quality.

Perceived Usefulness. Consumer perceptions about the usefulness of a website can be said the prospect of a consumer put confidence to adopt an information technology.

Perceived Ease of Use. Consumer perceptions regarding ease of use relate to the extent to which consumers have expectations of an information technology that will not provide difficulties physically and mentally adaptation. A system that is difficult to use will be avoided by consumers.
Perceived Enjoyment. Consumer perceptions of a website's product preferences affect consumers to search for information. With this fondness makes a website look more attractive and directly affects consumer buying intentions.

Perceived Trust. Consumer confidence is something that is difficult to measure because it is very complex. In doing online shopping, consumer confidence is needed because consumers can not see the physical form of the product being sold before buying. The greater consumer confidence in a website will increase consumer interest in using products from the website.

Attitude. The attitude of consumers in responding to information technology is formed through consumer perceptions of the usability and ease of use of the website. The more positive the consumer's perception of these two factors, the more positive the consumer's attitude towards a technology.

2.3. Communication Understanding

According to Tatik Suryani [20], communication is simply interpreted as the process of delivering messages from source to recipient. Communication comes from English communication, which comes from the Latin word communicatio and comes from the word communis meaning "same". "Same" is meant in this sense is the same meaning. If there are two people who are having a conversation, then communication occurs if there is a common meaning about what is being said. Even though the two people who were conversing use the same language, it doesn't necessarily lead to the same meaning. Besides understanding the language used in the conversation. Effective communication must also understand the meaning of the material being discussed.

According to Philip Kotler and Kevin keller[21] The Communication Process Model is divided:

Macro Communication Process Model. The Macro Communication Model has nine elements. Two elements present the main parties in communication, namely the sender and the receiver. The other two elements present the main communication tools namely the message (message) and the media. The four elements present the main communication functions: encoding, decoding, response, and feedback. The final element in the system is noise interference (random and competing messages that can interfere with the intended communication).

Micro Consumer Response Model. The micro marketing communication model concentrates on the specific response of consumers to communication. Four classical response hierarchy models. All of these models assume that the buyer passes the cognitive, affective, and behavioral stages.

The purpose of communication according to Kotler and Kevin [21] is intended for:

Category Needs. Determine the categories of products or services needed to divert or satisfy differences in assumptions between current motivational states and desired emotional states.

Brand Awareness. The ability to identify (recognize or remember) brands in a category, with enough detail to make a purchase.

Brand Attitude. Evaluate the brand by paying attention to the ability of its perception to meet the current relevant needs.

Purpose of Brand Purchasing. Stand alone instructions for buying a brand or taking actions related to the purchase.

2.4. Website Quality (Webqual)

According to Maryani et. al [22], Webqual is one of the methods or techniques for measuring website quality based on the end user's perception. Website Quality is one of the concepts used in measuring website quality based on the perception of end users. This concept is a development of SERVQUAL that was widely used before in measuring service quality. Website Quality or commonly called WebQual has started to be developed since 1998 and has undergone several iterations in the compilation of dimensions and questions.

The webqual indicator refers to the variables webqual 4.0 [23,24] are:

Usability is "as a user experience in interacting with applications or websites until the user can operate it easily and quickly".

The quality of information has been divided into several questions, namely regarding information that is accurate, reliable, timely, relevant, easy to understand, according to needs and in accordance with the format.

The quality of service interaction has been divided into several questions, namely regarding the reputation of the site, security in transactions, security of confidentiality of personal information, a sense of personalization, the presence of community, communication with the company and the suitability of the order.
2.5. Trust

According to Vidgen and Barnes [25], trust is the belief that someone will find what he wants in an exchange partner. Trust involves a person's willingness to behave in a certain way because of the belief that his partner will give what he expects and a hope that is generally owned by someone that someone else's words, promises or statements can be trusted.

Houcine et. al. [26] and Patty [3] defines credibility as the extent to which buyers believe that suppliers have the expertise to carry out activities effectively and reliably. trust is related to the company's intention to rely on their exchange partners. They explained that trust is a virtue, because it is based on the extent to which the company believes that its partners have beneficial intentions and motives[6,19]. We conclude that trust is the extent to which the buyer believes that the seller has a reliable product or work system so that the buyer does not hesitate in the transaction.

The factors that influence trust in the company are[27]:

**Experienced.** Experience is relevant to the work carried out by companies, regarding business and company achievements in the economic field and so on. A lot of experience and interesting in business, will make the company better understand the wants and needs of customers.

**Quality of work.** Quality of work is the process and results of company work that can be valued by some customers or the public. Unlimited quality work will produce quality trust.

**Intelligence.** The company's ability to manage problems that occur within the company. Intelligence can also build trust, because high credibility without being based on intelligence in attracting customers is not able to increase customer trust.

2.6. Loyalty

According to Govind et. Al. [28], loyalty (commitment) is a deeply held commitment to buy or support a product or service that is preferred in the future even though the influence of the situation and marketing efforts have the potential to cause customers to switch.

According to Griffin [29], "loyalty is defined as non-random purchases expressed over time by some decision making units." Based on these definitions, it can be explained that loyalty refers more to the manifestation of the behavior of the decision-making units to make continuous purchases of goods or services of a chosen company.

According to Wulf, Gaby and Lacobucci [30], Loyalty is the amount of consumption and the frequency of purchases made by a consumer of a company.

Based on some of the above understanding, the authors conclude that loyalty is the loyalty or commitment held by the buyer to the seller of a product or service.

According to Bridson et. al. [31], to measure loyalty, several attributes are needed, namely:

- Saying loyalty, several attributes are needed, namely:
  - Saying positive things about the company to others;
  - Recommend the company to others who ask for advice;
  - Considering that the company is the first choice when purchasing services;
  - Do more business or purchase with the company in the next few years.

2.7. Customer

A customer is a person or company that receives, consumes or buys a product or service and can choose between different goods and suppliers[32]. Customers are people who buy and use products. In a company engaged in services, customers are people who use services.

The author concludes that the customer is a person who buys and uses a product or service in the same place to meet his needs and desires.

According to Bendapudi and Berry [33], customer loyalty in the context of service marketing is defined as a response that is closely related to a pledge or promise to uphold commitments that underlie relationship continuity, and is usually reflected in ongoing purchases from the same service provider on the basis of dedication as well as pragmatic constraints.

According to Kim, DJ, Lee, KY, Lee, D., Ferrin, DL, and Rao [34], customer loyalty is the intention of customers to return to use something based on experience and their hopes in the past. In the context of e-commerce, customer loyalty is measured by the number of customers in making transactions.

Based on some of the above understanding, the authors conclude that customer loyalty is a commitment or loyalty held by consumers or buyers to certain sellers so that buyers will only make transactions or buy and sell to these
sellers even though competition in the marketing world is very tight.

3. RESEARCH METHODS

The research model is carried out to illustrate the research paradigm that will be used as an answer to the research problem. The research model contains independent variables (technological progress, marketing communications and E-Commerce web services) that affect the dependent variable (customer loyalty) and the intervening variable (trust). The research model can be seen in Figure 2.

![Figure 2: Structural Model Estimation](image)

The research model is also complemented by various indicators of dimensions including:

Technological Progress - X1 (Perceived Quality of E-Shopping, Perceived Usefulness, Perceived Ease of Use, Perceived Enjoyment and Attitude).

Marketing Communication - X2 (Advertising, Sales Promotion, Events and Experience, Public Relations and Publicity, Direct Marketing, Interactive Marketing, Mouth-to-Mouth Marketing and Personal Sales).

E-Commerce Web Services - X3 (Use, Information Quality and Service Interaction Quality).

Trust - Y1 (Experience, Quality of Work and Intelligence).


The research was descriptive in nature and verification. Descriptive research because, this research aims to gain an overview or descriptive of the characteristics of a variable. The study also are verification which is a research to find out the model presented may be accepted as a tool for decision making and know the relationships between variables through a hypothesis testing. According to Ghozali in (Nawangsari, 2015)[6] research is the concept of an abstract variable that can be measured. Abstract concepts that include job satisfaction, commitment, motivation. Abstract concepts that are directly measurable called observed variables or manifest. Nevertheless there are abstract concepts which cannot be measured directly or unobserved variable (often also called latent or invalid constructs). The independent variable in this study is the advancement of technology and E-Commerce Web services. The dependent variable in this study is customer loyalty. Intervening variables in this research is trust.

The population of the region is a generalization which consisted of objects or subjects that have certain qualities and characteristics set by the researchers to learn and then draw the conclusion[7] , the population in this research is a customer of e-commerce online store Bukalapak.com that have already bought, often buys or trades but have never had the desire to transact in the future.

The sample is part of the number and characteristics of which are owned by the population. According to Santoso [8] to the size of the sample using the most popular estimation method in analysis of SEM that is Maximum Likelihood (ML). Number of samples for this study was 140.

As for the assessment of the answers of the respondents will be given the assessment given the data in this research is quantitative data using Likert scale then with the range scale of 1-5. Data collection methods used in this research is seen from the data source that is a primary source, is the source of data that directly provides data to the data Gatherer. Here the author uses techniques of survey
through questionnaire online and secondary sources, is a source which does not directly provide the data to the data Gatherer. Here the author uses books, internet and network journal as a guide, a guide and get information.

Analysis of measurement model in this study using SEM (Structural Equation Modelling). But before the analysis is carried out, there is a testing instrument that is test validity and reliability. After the test, the instrument can be said to be valid research on the entire question items and reliability throughout the variables used. Analytical techniques descriptive analysis starts with the data. After that to know the goodness of fit of the model then done analysis model (Confirmatory Factor Analysis). Final results of the CFA is obtained from test match model, the analysis of the validity of the model, and analysis of reliability models. Analysis of the validity of the model is done by checking two things from the observable variables in the model, i.e., whether the value – t (t-value) is greater than 1.96 and see the payload factor (loading factor) is equal to or greater than 0.50. Reliability analysis of measurement model is done by calculating the value of the Construct of Reliability (CR) and Variance Extracted (VE). Reliability model is said to be good if the value of the CR is equal to or more than the value of 0.70 and VE the same or more than 0.50. Then the data were analyzed with techniques of Structural Equation Modelling (SEM) and conducted simultaneous trials and partial test.

4. RESULTS

4.1. Descriptive Analysis

Respondents according to the online questionnaire conducted in this study, respondents who often use the web or transacting on this Bukalapak.com is the female sex as much as 80 (57.1%) of the respondents, with the age range of 20-30 years as many as 95 (67.9%) of respondents, the last high school education has as many as 122 (87.1%), and then have a job or profession as a student or students as much as 80 (57.1%) of respondents and who do shop online during the 0.5 – 1st that is as much as 76 (54.3%) of the respondents. According to the opinion of the respondents, variable technology advances at Bukalapak.com the most good is the dimension of perceived ease of use by the average value of 3.86. Then followed by the dimensions of perceived quality of e-shopping with an average value 3.85, dimension of the perceived enjoyment with an average value of 3.83, then the dimensions perceived usefulness with the average value of 3.72 and then the lowest is perceived attitude with an average rating of 3.56. This indicates that Bukalapak.com should improve the ideas that appeal to customers so as to provide benefits to customers. But overall each dimension or indicators of progress of technology Bukalapak.com have average value that have a good category i.e. of 3.76.

According to the opinion of the respondents, the variable e-commerce web service Bukalapak.com the most good is the dimension of quality information with a 3.71 average rating, then followed the dimensions of usability with an average rating of 3.64, and the last is the dimension of the quality of the service interaction with average value of 3.61. This indicates that the site Bukalapak.com in providing interaction needs to be improved. But the overall dimensions of each indicator or e-commerce web service Bukalapak.com have average value that have a good category i.e. amounting to 3.65.

According to the opinion of the respondents, the variable trust Bukalapak.com the most good is the dimension experienced with an average rating of 3.76, next dimension of the intelligence with an average rating of 3.69, and the last is the dimension quality of work of 3.66. But overall each dimension or the trust indicators Bukalapak.com has the average value of which have good categories namely of 3.70 . According to the opinion of the respondents, variable customer loyalty Bukalapak.com the most good are dimensions recommend to a friend and dimension to continue purchasing with an average of 3.92, and the last dimension is to say positive things with the assessment of the average value of 3.57. A descriptive analysis of overall it can be concluded that the customer have a loyalty to the online shop Bukalapak.com because has the average value of which have good categories namely of 3.80.

4.3. Analysis of Realibility and Validity

Test the validity of the questionnaire made against 140 respondents, if the statement list is reliability test results has reached Cronbach Alpha
coefficient greater than 0.6 then list the statement declared valid and reliable to use as measurements of the variables.

Table 1: Test the validity of variable technology advances, web services to e-commerce, trust and customer loyalty.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Corrected Item-Total Correlation</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology Advances</td>
<td>.523</td>
<td>10</td>
</tr>
<tr>
<td>Web Services to E-Commerce</td>
<td>.498</td>
<td>6</td>
</tr>
<tr>
<td>Trust</td>
<td>.569</td>
<td>6</td>
</tr>
<tr>
<td>Customer Loyalty</td>
<td>.575</td>
<td>6</td>
</tr>
</tbody>
</table>

Source: SPSS Output, processed

Table 1 shows the average results of the validity test for overall indicators of the four variables in this study, i.e., technology advances, web services to e-commerce, trust and loyalty. Entire indicator of overall indicators show good results. The entire variable value is Corrected Item-Total Correlation > 0.300 so declared valid and can be used as measuring instrument as an instrument of research.

Table 2.: Test of reliability of variable technology advances, web services, trust and customer loyalty, N=28

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cronbach’s Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology Advances</td>
<td>.851</td>
<td>10</td>
</tr>
<tr>
<td>Web Services to E-Commerce</td>
<td>.814</td>
<td>6</td>
</tr>
<tr>
<td>Trust</td>
<td>.825</td>
<td>6</td>
</tr>
<tr>
<td>Customer Loyalty</td>
<td>.822</td>
<td>6</td>
</tr>
</tbody>
</table>

Source: SPSS Output, processed

As for the reliability test is seen from table 2 shows the results of the reliability of each variable and the overall N = 28, have a value of Cronbach’s Alpha > 0.600 i.e. for technological advances to 0.851, to variable web services e-commerce 0.814, for variable trust 0.825 and for variable customer loyalty 0.822, so it can be inferred that these variables are reliable fourth.

Table 3.: Construct reliability and variance extracted technology advanced

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Loading</th>
<th>Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usefulness</td>
<td>0.898</td>
<td>0.193</td>
</tr>
</tbody>
</table>

Source: AMOS Output, processed

Table 3: discribe results of calculation of construct reliability of the whole construct indicators of each dimension of the technological advances of more than 0.70 is 0.83, likewise with the value variance extracted obtained more than 0.50 is 0.50. This indicates that advances in technology reliability and meet the requirements of confirmatory factor analysis.

4.4. Suitability Analysis Model

Analysis of the validity of the model is done by checking two things from the observable variables in the model, i.e., whether the value – t (t-value) is greater than 1.96 and see the payload factor (loading factor) is equal to or greater than 0.50. Reliability analysis of measurement model is done by calculating the value of the Construct of Reliability (CR) and Variance Extracted (VE). Reliability model is said to be good if the value of the CR is equal to or more than the value of 0.70 (seen in table 4) and VE the same or more than 0.50. The following is an explanation of the analysis for each variable of research.

Table 4.: Construct reliability and variance extracted e-commerce web services

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Loading</th>
<th>Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Quality of E-Shopping</td>
<td>0.740</td>
<td>0.452</td>
</tr>
<tr>
<td>Perceived Usefulness</td>
<td>0.719</td>
<td>0.483</td>
</tr>
<tr>
<td>Perceived Ease Of Use</td>
<td>0.613</td>
<td>0.624</td>
</tr>
<tr>
<td>Perceived Enjoyment</td>
<td>0.759</td>
<td>0.424</td>
</tr>
<tr>
<td>Perceived Attitude</td>
<td>0.707</td>
<td>0.500</td>
</tr>
</tbody>
</table>

CR ≥ 0.70 0.83
VE ≥ 0.50 0.50

Source: AMOS Output, processed

The results of calculation construct reliability of the whole construct indicators of each dimension to e-commerce web services more than 0.70 i.e. 0.77, likewise with the value variance extracted obtained more than 0.50 i.e. 0.54. It indicates that an e-commerce web services reliability and meet the requirements of confirmatory factor analysis.
Table 5.: Construct reliability and variance extracted

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Loading</th>
<th>Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experienced</td>
<td>0.744</td>
<td>0.446</td>
</tr>
<tr>
<td>Quality of Work</td>
<td>0.713</td>
<td>0.492</td>
</tr>
<tr>
<td>Intelligence</td>
<td>0.684</td>
<td>0.532</td>
</tr>
<tr>
<td>CR ≥ 0.70</td>
<td>0.76</td>
<td></td>
</tr>
<tr>
<td>VE ≥ 0.50</td>
<td>0.51</td>
<td></td>
</tr>
</tbody>
</table>

Source: AMOS Output, processed

The results of construct reliability of the whole construct indicators of each dimension of trust more than 0.70 i.e. 0.76, likewise with the value variance extracted obtained more than 0.50 i.e. 0.51. It signifies that the trust and reliability meet the requirements of confirmatory factor analysis. For detail can be seen in table 5.

Table 6.: Construct reliability and variance extracted

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Loading</th>
<th>Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Say Positive Things</td>
<td>0.823</td>
<td>0.323</td>
</tr>
<tr>
<td>Recommend Friends</td>
<td>0.790</td>
<td>0.376</td>
</tr>
<tr>
<td>Continue Purchasing</td>
<td>0.628</td>
<td>0.606</td>
</tr>
<tr>
<td>CR ≥ 0.70</td>
<td>0.79</td>
<td></td>
</tr>
<tr>
<td>VE ≥ 0.50</td>
<td>0.56</td>
<td></td>
</tr>
</tbody>
</table>

Source: AMOS Output, processed

Tabel 6 discrabe results of construct reliability of the whole construct indicators of each dimension customer loyalty more than 0.70 i.e. 0.79, likewise with the value variance extracted obtained more than 0.50 i.e. 0.56. This indicates that customer loyalty and reliability meet the requirements of confirmatory factor analysis.

4.5. Analysis Of Suitability Of The Overall Model

Table 7.: Test matches some of criteria of goodness of fit index

<table>
<thead>
<tr>
<th>Index</th>
<th>Ambang batas¹</th>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GFI</td>
<td>≥ 0.90</td>
<td>0.877</td>
<td>Marginal</td>
</tr>
<tr>
<td>AGFI</td>
<td>≥ 0.90</td>
<td>0.824</td>
<td>Marginal</td>
</tr>
<tr>
<td>TLI</td>
<td>≥ 0.90</td>
<td>0.916</td>
<td>Good</td>
</tr>
<tr>
<td>CFI</td>
<td>≥ 0.90</td>
<td>0.932</td>
<td>Good</td>
</tr>
</tbody>
</table>

Description :
¹ Less than 0.90 = Marginal
Between up to 0.90 0.95 = Good
Well Above 0.95 = Very Good
² Between 0.05 up to 0.08 = Good

Based on the values of the coefficients above, it can be concluded that in general the model has earned a good degree of suitability. Of the five sizes of GOF is seen, three sizes have shown good or good match fit so that the models used can provide confirmation that enough to be able to accept the hypothesis. For details can be seen in table 7.

4.6. Structural Equation Model Analysis

Structural equation modeling (SEM) analysis is used to determine the structural relationship between the variables studied.

Structural relationships between variables were tested for compatibility with the goodness-of-fit index. The results of structural equation modeling analysis in this research can be seen in Figure 3.

Figure 3: Test Results Of Conformity Model Research
5. DISCUSSION OF HYPOTHESIS

H1 : There is the influence of technological advances against trust. Table 8 shows the influence of technological advances against trust of 0.634 with 0.1% significance level (P-value of 0.000 or ≤ 0.05), and the value of the critical ratio (CR) of 5.525 (CR ≥ 1.96). It can be said that technological advancements significantly influential to customer trust so that it can be said that the technological advances that are either provided by Bukalapak.com is in compliance with customer's expectations.

H2 : There is the influence of E-Commerce Web service against the trust. Table 8 shows that e-commerce web services take effect directly against the belief of 0.339 by 0.1% significance level (P-value of 0.000 or ≤ 0.05), and the value of the critical ratio (CR) amounted to 3.396 (CR ≥ 1.96). It can be said that e-commerce web services significant to the influential consumer trust so that it can be said that the variable e-commerce web service is a good predictor for the customers.

H3 : There is the influence of trust of customer loyalty. Table 8 shows that the confidence effect directly against customer loyalty with a level of significance of 0.863 0.1% (P-value of 0.000 or ≤ 0.05), and the value of the critical ratio (CR) of 8.018 (CR ≥ 1.96). Based on these results it can be concluded that the trust significantly influential to customer loyalty, this means that the trust customers against the services provided will be more loyal customers then that means confidence felt by customers making customers become loyal towards Bukalapak.com.

5.1. The Influence of Technology Advances and E-Commerce Web Service against the Trust

Based on Table 8, the simultaneous advances in technology and e-commerce web services affect the trust value of determination (R²) of .770 or 77%. This indicates that these two variables give the contribution together in the variable trust of 77% and 23% are thought to be influenced by other variables not in the model.

Value estimation of technological advances against trust of 0.634 and e-commerce web service against the belief of 0.339, at the same time the influence of both these variables can be dissubstitusikan into a mathematical equation as follows:

\[
\text{Trust} = 0.634 \times \text{TA} + 0.339 \times \text{EC} + e
\]

From equation (1) can be known that advances in technology and e-commerce web service providing a positive influence towards trust.

Technological advances provide a greater against the trust. Bukalapak.com have to keep providing services we recommend to customers. This is in line with the research (Phelp, 2013)[9] that says that customer trust towards purchase via online shop powered by technology that is easy to use and provide more benefits. This is proved by the results of testing a hypothesis stating that aspect of the technology acceptance model has positive influence either partially or simultaneously against the trust.

The quality of the web or e-commerce web services occupy the influence of positive and significant confidence after technological advances. Research conducted ahmadi [10]; Hotlan Siagian, [11]) says that the Website Quality proven effect on Trust. Display informative, an impression of security, ease of operation, convenience in use, as well as the good quality of service of the website was able to increase training requirements-consumer cayaan against the capability or kompetensi online shop in providing services.

5.2. The Influence of Trust of Customer Loyalty

Based on Table 8, note that the confidence effect on customer loyalty Bukalapak.com. the magnitude of the influence of the belief in the loyalty shown by the value of the determination (R²) magnitude .745 or 74%. This indicates that the Trust provides 74% influence on loyalty and 26% are thought to be influenced by other variables not in the model. The influence of trust of loyalty has a
value estimate of 0.907 so it can be disubstitusikan in a mathematical equation as follows:

\[
\text{Loyalty} = 0.907 \times \text{trust} + e
\]  
(2)

From equation (2) it is known that the trust can provide a great influence on loyalty to the value estimate 0.917.

So that customers at Bukalapak.com increasingly loyal then the service and the quality of the web that is in Bukalapak.com needs to be improved so that customers would not switch and remain loyal. This means that the trust customers against the services provided will be the more loyal towards Bukalapak.com. This is in line with (Lin. et al., 2011; Ni Putu Lenny, 2015)[12,13], stating that the quality of service significantly influential in improving trust.

6. CONCLUSIONS

The presence of the influence of technological advances against trust. So it can be said that if the technology is applied to good service then the customers or users will trust with the services and the performance of which has been provided by Bukalapak.com, where high technology can create a high trust.

E-Commerce Web service (WebQual) effect on confidence. If the quality of the web is great then the customers will be satisfied with the services provided by Bukalapak.com web Bukalapak.com or the quality will increase the confidence felt by customers who use the website.

The confidence effect on customer loyalty. This means that the trust customers against the services provided will be more loyal customers then that means confidence felt by customers making customers become loyal towards Bukalapak.com. Customers will feel the trust services received can develop a variety of attitudes and behaviours that describe a sense of loyalty, for example recommending to others, making a purchase or say things that are positive about Bukalapak.com to others.

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