



# The Influence of Brand Ambassador and E-Service Quality on E-Commerce Purchase Decision

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## ABSTRACT

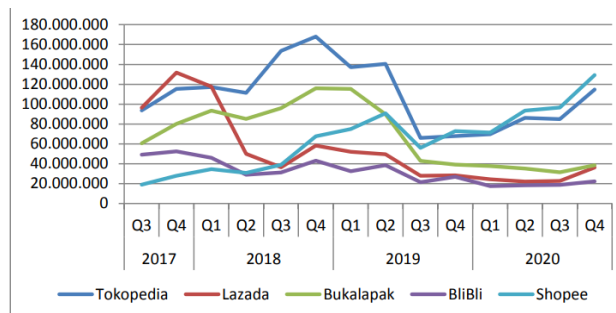
This study aims to examine and analyse the effect of brand ambassadors and e-service quality on purchasing decisions on Tokopedia. Research design using questionnaire distribution to the BTS fanbase via social media with 192 samples. The sampling method in this research use probability sampling with a proportionate stratified random sampling technique, then the research sample is guided by Maximum Likelihood. Further research can be considered using a nonprobability sampling method and research sample guidelines other than Maximum Likelihood. This study examines the model regarding the influence of Brand Ambassador and E-Service Quality on Tokopedia purchasing decisions survey on BTS Indonesia fanbase. The analytical method uses Structural Equation Modelling (SEM) Analysis with the AMOS program. The result shows that, partially, Brand Ambassador has a positive and significant effect on BTS purchase Decision. E-Service quality has a positive and significant impact on BTS purchase decisions. Simultaneously, there is a positive and significant influence between Brand Ambassador and E-Service Quality on Purchase Decisions. Simultaneously, the effect between Brand Ambassador and E-Service Quality on BTS Purchase Decision is 72.5%. The study results have implications that companies must pay attention and continue to evaluate the performance of Brand Ambassadors to attract the attention of potential consumers to make purchases at Tokopedia and compete with their competitors. In addition, Tokopedia is expected to improve, maintain, and improve the quality of customer service services to potential customers so that consumers feel satisfied, trust, and continue to make purchases at Tokopedia.

**Keywords:** Brand Ambassador; E-Service Quality; Purchase Decision

## 1. INTRODUCTION

The phenomenon of practical shopping is supported by the emergence of various online sites that can meet all consumer needs in a practical, safe and complete way. The ease of accessing the internet helps people reach e-commerce. Shopping sites that provide various types of goods and can be used by multiple manufacturers to market their products are called e-commerce [1], [2].

There are 49 marketplaces in Indonesia, one of which is several popular E-commerce sites in Indonesia, namely Lazada, Shopee, Tokopedia, Bukalapak, and Blibli.com [3], [4]. Local e-commerce began to be followed by regional e-commerce when viewed based on the number of visits to the respective e-commerce websites, as shown in Figure 1.



**Figure 1** Graphics of visitors to E-Commerce Websites in Indonesia

(Source: Data processed by the author on April 7, 2021 at 13:37 WIB <https://iprice.co.id/insights/mapofecommerce/>)

Based on the data presented in Figure 1, E-commerce in Indonesia has fluctuated. Still, Tokopedia experienced significant fluctuations, so Shopee was followed by a newcomer status that started with 20 million website visitors in the third quarter of 2017 continues to rise to date. Tokopedia in 2017 until mid-2019 remained consistent in its first position, while its competitors tended to increase to take Tokopedia's position, this became a problem because one of the local e-commerce sites, namely Tokopedia, was no longer the market leader of e-commerce in Indonesia but had been taken over by regional e-commerce namely Shopee. This also proves that the marketplace is trying to win over each other's market share.

E-commerce offering products at low and affordable prices, discounts, and free shipping makes consumers interested in making online purchasing decisions. The company expects high purchasing decisions because high purchasing decisions indicate that a product or service has attracted consumers' attention. Purchasing decisions are consumer behaviours regarding involvement in choosing and determining decisions to use goods or services [5].

The promotional strategy is taken by Tokopedia to become a market leader and increase the Top Brand on online buying and selling sites, always evaluating the brand ambassador it chooses. Supported by research conducted [6], the promotional strategy used to carry out sales process actions as a provider of product information by using the services of a brand ambassador as done by Tokopedia, as a symbol representing a desire or need consumers easily accept that.

Tokopedia can still occupy the first position and maintain its popularity by improving the service quality. To enhance the quality of its services, Tokopedia can take advantage of user reviews on the Tokopedia application found on the Google Play store. Reviews contain many suggestions, compliments, and user complaints [7]. E-commerce business competition to attract consumer purchasing decisions must have its advantages. The website is a means of e-commerce. Therefore, consumers will judge the merits of e-commerce from the quality of its electronic services (e-service quality) [8]. Inadequate service can make potential buyers think twice about making purchasing decisions. Tokopedia is less responsive in handling hacked accounts. Namely, the lack of assistance from Tokopedia to buyers makes buyers disappointed and hesitant to shop at Tokopedia

again [9]. In the case of Tokopedia's data leak in early March 2020, about 91 million Tokopedia user account data were hacked and sold on the dark web at US\$ 5000.

## 2. METHOD

This research uses quantitative data research. This research was conducted on shoppers in e-commerce Tokopedia. The population in this study is BTS followers or fanbases in Indonesia. Determination of the sample size of respondents using Paul Leedy's formula by using a percentage of the tolerable error rate of 10% with a total of 100 samples. Sampling was done by using simple random sampling. The data collection method in this study was using a questionnaire collection technique at the BTS fanbase using Tokopedia. The variables studied consisted of two exponent variables: Brand Ambassador and E-Service Quality and one endogenous variable, namely Purchasing Decisions, with 10.15 constructs and 11 indicators per latent variable. The measurement scale used is a Likert scale with 1-5 points ranging from strongly disagree to agree strongly. The data analysis technique in this study uses SEM (Structural Equation Modelling) analysis techniques or Structural Equation Modelling assisted by IBM SPSS AMOS 24 software.

## 3. RESULT AND DISCUSSION

### 3.1. Confirmatory Factor Analysis

There are three measures to test the Confirmatory Factor Analysis (CFA) construct validity, namely convergent validity, reliability, and variance extraction, which are as follows:

#### 3.1.1. Validity Test with Construct Validity

Based on Table 1, the validity test results show that the BTS brand ambassador variable (X1), e-service quality, and purchasing decisions as many as 36 questionnaire statements have a Standardized loading estimate value above 0.5, so all indicators of the questionnaire statement are declared valid.

#### 3.1.2. Reliability Test with Construct Reliability Test

The method used to calculate the instrument's reliability using construct reliability, the limit value used to assess a level of reliability is 0.7. Still, according to Nunally and Berstein, reliability between 0.5 - 0.6 is sufficient to justify a research result.

**Table 1** Results of Reliability Testing with Construct Reliability

No	Variable	Sum Standardized Loading	Sum Measure Error	Construct Reliability	Criteria	Conclusion
1	Brand Ambassador	66.097	2.544	0.963	>0.7	Reliable
2	E-Service Quality	121.771	4.328	0.966	>0.7	Reliable
3	Purchase Decision	69.773	3.220	0.956	>0.7	Reliable

Source: AMOS 24 data processing results, 2021 researchers

Based on Table 2 above, it shows that the brand ambassador variables, e-service quality, and purchasing decisions obtain Construct reliability on each variable > 0.7, which means that the three variables in this study are reliable.

**3.1.3. Reliability Test with Average Variance Extracted (AVE) Test**

Average Variance Extracted (AVE) is calculated as the total square of the standardized factor loading divided

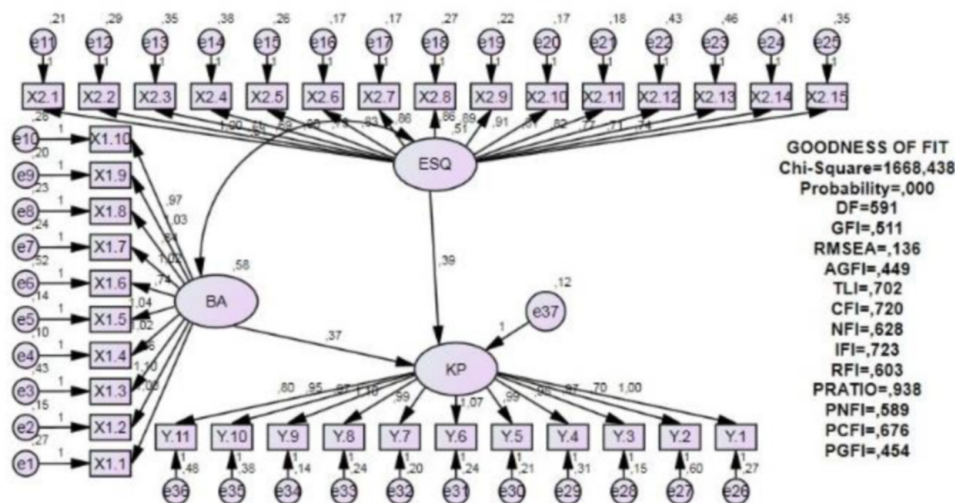
by the total square of the standardized loading plus the total Variance of the error. The AVE value equal to or above > 0.5 indicates a good convergence.

Table 3 shows that the brand ambassador variable, e-service quality, and purchasing decisions obtain an Average Variance Extracted (AVE) value on each variable > 0.5, which means that the three variables in this study are said to be reliable.

**Table 3** Results of Reliability Testing with AVE

Variable	Sum (Standardized Loading) <sup>2</sup>	Sum Measure Error	Construct AVE	Criteria	Conclusion
Brand Ambassador	6.745	2.489	0.730	>0.5	Reliable
E-Service Quality	8.118	4.389	0.649	>0.5	Reliable
Buying decision	5.858	2.946	0.665	>0.5	Reliable

Source: AMOS 24 data processing results, 2021 researchers



**Figure 5** Path Diagram Model

**3.2. Structural Equation Modelling and Analysis Stages**

The following are the steps of the SEM analysis technique on AMOS 24, where the stages in this study refer to the stages, namely:

**3.2.1. Theory Based Model Development**

The development of the constructed model in this study is based on the theoretical concept that has been explained in the theoretical research, where there are 36

indicators formed from 3 latent variables of which 2 exogenous variables are Brand Ambassador and E-Service Quality and 1 endogenous variable is Purchase Decision with each 10.15 constructs and 11 indicators per latent variable, respectively.

**3.2.2. Drawing up a Path Chart**

Compiling a structural model is connecting between latent constructs (endogenous and exogenous) then connecting these constructs and their indicators. The measurement model image of the research is shown in Figure 5.

**3.2.3. Compiling Structural Equations**

**Table 4** Measurement Model of Each Construct

No	Brand Ambassador	E-Service Quality	Buying decision
1	$X1.1 = \lambda_{BA} + e1$	$X2.1 = \lambda_{ESQ} + e11$	$Y.1 = KP + e26$
2	$X1.2 = \lambda_{BA} + e2$	$X2.2 = \lambda_{ESQ} + e12$	$Y.2 = KP + e27$
3	$X1.3 = \lambda_{BA} + e3$	$X2.3 = \lambda_{ESQ} + e13$	$Y.3 = KP + e28$
4	$X1.4 = \lambda_{BA} + e4$	$X2.4 = \lambda_{ESQ} + e14$	$Y.4 = KP + e29$
5	$X1.5 = \lambda_{BA} + e5$	$X2.5 = \lambda_{ESQ} + e15$	$Y.5 = KP + e30$

No	Brand Ambassador	E-Service Quality	Buying decision
6	$X1.6 = \lambda BA + e6$	$X2.6 = \lambda ESQ + e16$	$Y.6 = KP + 31$
7	$X1.7 = \lambda BA + e7$	$X2.7 = \lambda ESQ + e17$	$Y.7 = KP + e32$
8	$X1.8 = \lambda BA + e8$	$X2.8 = \lambda ESQ + e18$	$Y.8 = KP + e33$
9	$X1.9 = \lambda BA + e9$	$X2.9 = \lambda ESQ + e19$	$Y.9 = KP + e34$
10	$X1.10 = \lambda BA + e10$	$X2.10 = \lambda ESQ + e20$	$Y.10 = KP + e35$
11		$X2.11 = \lambda ESQ + e21$	$Y.11 = KP + e36$
12		$X2.12 = \lambda ESQ + e22$	
13		$X2.13 = \lambda ESQ + e23$	
14		$X2.14 = \lambda ESQ + e24$	
15		$X2.15 = \lambda ESQ + e25$	

Source: Edited by the Author, 2021

**Table 5** Output model Summary

Number of distinct sample moments	: 666
Number of distinct parameters to be estimated	: 75
Degrees of freedom (666 - 75)	: 591

Source: Amos 24 data processing, Author 2021

### 3.2.4. Selecting the Matrix input type and the proposed Model Estimation

The confirmatory factor analysis of the input matrix type in this study uses Maximum estimation *Likelihood* (ML), estimated ML.

Based on this study with 192 samples each, the number of covariance and Variance can be calculated using the formula  $p(p+1)/2 = 36(36+1)/2 = 666$  while the number of parameters to be estimated 75, the degree of freedom =  $666-75 = 591$  so this model is overidentified. As already explained, the maximum likelihood (ML) estimation requires the observed variables to meet multivariate normality.

**Table 6** Initial Model GOF Test Results

GOODNESS OF FIT				
GOF size	Criteria	Cut of Value	Model Results	Description
<b>Absolute Fit Measures</b>	<b>Chi Squares</b>	Expected small	1,668.44	Not good
	<b>Probability</b>	0.05	0	Not good
	<b>CMIN/DF</b>	2.00	2,823	Not good
	<b>GFI</b>	0.90	0.511	Not good
	<b>RMSEA</b>	0.08	0.136	Not good
	<b>AGFI</b>	0.90	0.449	Not good
	<b>TLI</b>	0.90	0.702	Not good
<b>Incremental Fit Measures</b>	<b>CFI</b>	0.90	0.72	Not good
	<b>NFI</b>	0.90	0.628	Not good
	<b>IFI</b>	0.90	0.723	Not good
	<b>RFI</b>	0.90	0.603	Not good
	<b>PRATIO</b>	0.60	0.938	Good
<b>Parsimonious Fit Measures</b>	<b>PNFI</b>	0.60	0.589	Not good
	<b>PCFI</b>	0.60	0.676	Good
	<b>PGFI</b>	0.60	0.454	Not good

Source: Results of AMOS 24 data processing, Researcher 2021

### 3.2.6. Assessing the Goodness of Fit Criteria

Based on Table 6 in BTS research, it can be seen that some of the model's feasibility criteria show results that

### 3.2.5. Assessing Structural Model Identification

The structural model's identification can be done by calculating the amount of covariance and variance data compared to the parameters to be estimated. The output model summary can be used to calculate the following, presented in Table 5.

The normality test results after the data have been transformed in the cr column for multivariate in BTS research, the value is -0.164, far below the value of  $\pm 2.58$  at a significance level of 1%. Therefore, it can be said that there is no evidence that the distribution of the observed variable data is not normal (or it is proven that the data is normally distributed).

do not fit. The chi-square value in BTS shows a value of 1.668.440. The technique is done by eliminating one of the indicators suggested by Standardized Residuals and Modification Indices.

### 3.2.7. Model Interpretation and Modification

The re-specification model for deleting indicators, in this case, has been carried out by. From the results of the

re-specification carried out, the results are shown in Figure 5 and Figure 6, and Table 7 following the technique carried out.

Pengaruh Brand Ambassador dan E-Service Quality Terhadap Keputusan Pembelian Tokopedia

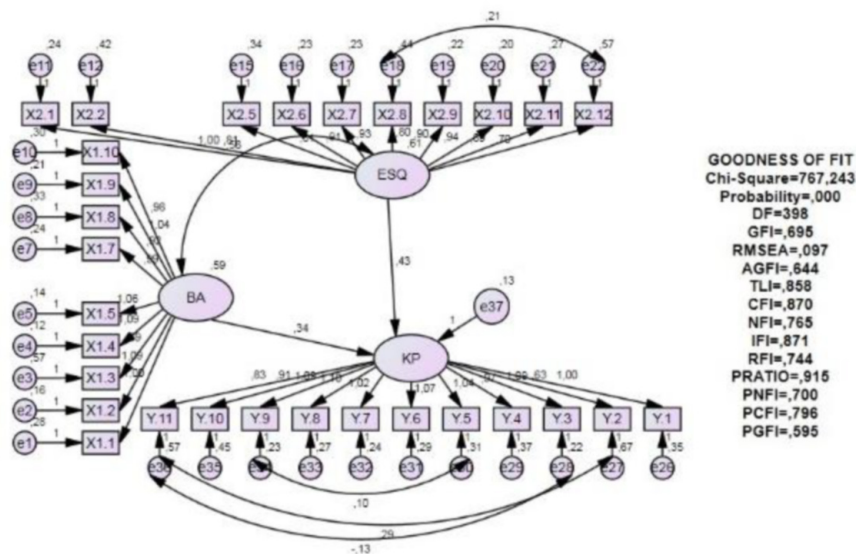


Figure 6 Final BTS Modification

Based on Figure 6 the BTS modification eliminates indicators including Expertise, Ease of use of the Tokopedia application, Accuracy of the Tokopedia

application when receiving confirmed orders, Availability of returning goods, Availability of free shipping costs.

Table 7 Final Model GOF Test Results

		GOODNESS OF FIT		
GoF size	Criteria	Cut of Value	Model Results	Description
	<b>Chi Squares</b>	Expected small	767.243	Not good
<b>Absolute Fit Measures</b>	<b>Probability</b>	0.05	0	Not good
	<b>CMIN/DF</b>	2.00	1.927	Good
	<b>GFI</b>	0.90	0.695	Not good
	<b>RMSEA</b>	0.08	0.097	Not good
	<b>AGFI</b>	0.90	0.644	Good
<b>Incremental Fit Measures</b>	<b>TLI</b>	0.90	0.858	Marginal
	<b>CFI</b>	0.90	0.87	Marginal
	<b>NFI</b>	0.90	0.765	Not good
	<b>IFI</b>	0.90	0.871	Marginal
	<b>RFI</b>	0.90	0.744	Not good
<b>Parsimonious Fit Measures</b>	<b>PRATIO</b>	0.60	0.915	Good
	<b>PNFI</b>	0.60	0.7	Good
	<b>PCFI</b>	0.60	0.796	Good
	<b>PGFI</b>	0.60	0.595	Marginal

Source: Results of AMOS 24 data processing, Researcher 2021

Based on Table 7, the modified goodness of fit test results using the technique of eliminating indicators and adding covariance to the error indicators suggested by MI and SR resulted in a GOF that was quite fit compared to before the model repurification process was carried out. It is proven by the chi-square value, which is quite good than before and is marked by more than half of the goodness of fit categories stating good so that it can be

concluded that the model in BTS research is declared fit with the existing data, then hypothesis testing can be carried out.

## 4. CONCLUSION

Based on the results of the research that has been carried out, conclusions can be drawn regarding the



"Analysis of the Unified Theory Acceptance and Use of Technology (UTAUT) Model to Join in the Program through Behavioural Intention" are as follows:

1. This study shows that BTS has a relationship or correlation between Brand Ambassador and E-Service Quality with a coefficient of 0.931. This is evidenced by hypothesis testing that the Brand Ambassador and E-service quality variables positively correlate.
2. Partially, Brand Ambassador has a positive and significant effect on BTS purchase Decision with a coefficient of 38%
3. Partially, E-Service quality has a positive and significant effect on BTS purchase decisions with a coefficient value of 48.6%
4. Simultaneously, there is a positive and significant influence between Brand Ambassador and E-Service Quality on Purchase Decisions. Simultaneously, the impact between Brand Ambassador and E-Service Quality on BTS Purchase Decision is 72.5%.

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## DECLARATION OF INTERESTS

We would like to acknowledge that this paper meets all the ethical standards. Also, there is no conflict of interest, and the authors did not receive any funds for this paper.

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