Boarding House Provider Information with Multi Attribute Utility Theory (MAUT) Method

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Abstract

The increasing rate of population growth in urban areas to find work or study and the high Basic Credit Interest Rates for Home Ownership Loans, the choice of renting a boarding house can be an alternative for those who do not want to stay in the long term. Implementation of Decision Support System provide choices for information system in order to assist the community in choosing a place to live such as a boarding house. One method of Decision Support System is Multi Attribute Utility Theory (MAUT). MAUT can be interpreted as method of systematic comparison by finding the total weight of a set of values in the criteria to obtain results. MAUT method on a web-based information system, it can help people determine the choice of the desired boarding house. The results from the MAUT method will be used an objective consideration for users. The results of this study were tested by Technology Acceptance Model to measure the acceptance of systems. The calculation of TAM uses questionnaire distributed to 88 respondents and based on t-statistics on the TAM test, Perceived Ease of Use (PEOU) against Attitude Toward Using (ATU) is 2.660, Perceived Usefulness (PU) against ATU is 4.218. Then Behavior Intention to Use (BITU) for Actual System Use (ASU) is 16,122 and PU for BITU is 4,218. Where the indicator to have a positive influence when the value is above 1.9894. Meanwhile, ATU against BITU is only 1.179 which means that it does not have a positive influence.

I. INTRODUCTION

According to the Central Statistics Agency (BPS) of Banten Province in 2019, the population growth rate in Tangerang City was 2.35% [1]. With the increasing rate of population growth in the Tangerang area, especially urbanization to find work or study, many people need a place to live. Based on the Interest Rate for Home Ownership Loans at Bank BTN of 7.25% not including the addition of other assessment components from BTN [2]. The choice of renting a boarding house can be an alternative for those who do not want to live in the Tangerang area for a long time. Finding a boarding house by visiting each location is very difficult to do during this pandemic, it is necessary to have a decision support system for choosing a boarding house to make it easier for housing seekers. In addition, boarding house owners also need media to promote their boarding houses.

Today, information systems are not only a place to buy and sell goods, but also provide services [3]. Even some systems can not only display information, but can also provide options that can help users make decisions [4]. Alternative choices given from this decision support system do not always have to be the final decision, users may have other perspectives so they don't choose the results of the system. One method of decision support system is *Multi Attribute Utility Theory* (MAUT)[5].

According to Wiendhyra MAUT is a systematic comparison method that combines several criteria to get the desired results [6]. Meanwhile, according to Sari and Hayati MAUT is a method by finding the total weight of a set of equivalent values for each utility contained in each attribute [7]. They compared 3 boarding houses with several criteria. Assessment data collection was carried out with 10 respondents. After applying the method, it was found that boarding house B had the best value with a better value for rent and location criteria than boarding house A and C. In another research doing by Abdurrahman's [8] the MAUT method was used to determine the level impact of the flood disaster in Bantul Regency by generating ranking of high, medium and low impact for each sub-district. In Mardin's research MAUT is implemented in a Housing Selection Decision Support Information System by producing a rating of 10 alternative houses [9].

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Design of information systems required system testing, by testing the functional side of the system and the user side. To test the system, the Black Box Testing method [10] is used while from the user's point of view, the TAM [11]. The purpose of this test is as a step to reduce the possibility of errors and ensure that the output produced is as desired [12].

The system that has been created will be tested using the *Technology Acceptance Model* (TAM) method. Applying the technology acceptance model In this study [13], TAM was used to test user acceptance of the motorcycle parts sales information system. The TAM calculation results show that PEOU has more influence on the use of information systems for selling motorcycle parts than PU. Then in Rahayu's research, TAM assumes that *perceived ease of use* and *perceived usefulness* are the main influences on technology acceptance behavior[14]. Then in this study, the results of the TAM calculation show that PU does not affect the interest in using *e-learning* . In another study, TAM showed that PEOU and PU influenced user attitudes and interest in using *e-commerce information systems* clothing [15]. TAM can also measure the relationship between PU and PEOU on *actual usage* [16].

II. METHODS

2.1 Multi Attribute Utility Theory (MAUT)

The formula in MAUT [7] is as follows:

$$V(x) = \sum_{i=1}^{n} w_i . v_i(x) \quad \text{..} \text{....(1)}$$

Description:

$V(x)$ = Total review of alternatives x
w_i = Relative weight of the i-th criterion
$v_i(x)$ = The results of the review of the i-th criteria from the alternative x
i = Criteria index

While the values that have been obtained are calculated for normalization so that the resulting values 0-1 are also referred to as U(x) which can be seen in the following formula (2) :

$$U(x) = \frac{x - x_i^-}{x_i^+ - x_i^-} \quad \text{..} \text{....(2)}$$

Where:

$U(x)$ = utility value of alternative to – x
x_i^- = The lowest value on the i-th criterion in alternative x
x_i^+ = The highest value on the i-th criterion in alternative x

The stages of the MAUT method are as follows:
a. Describe Alternatives and Values on Predefined Criteria.
b. Group each alternative separately from each criterion
c. Determine the relative weight of each criterion
d. Accumulate the product of the relative weights of each criterion with the normalized results to obtain the total evaluation results of all alternatives
e. Perform analysis on a total evaluation of all alternatives and perform rankings.

To calculate TAM, the SMART PLS application is used. The steps for calculating TAM are as follows:
a. Define variable
   In this stage the dependent and independent variables are determined to be used in the test. The dependent variable is a variable whose value is influenced by the independent variable while the independent variable is a variable that can affect the dependent variable [15].
b. Develop questionnaire indicators
   In this stage, the indicators used in the questionnaire are compiled, then questions are made that are adapted to the indicators that have been made.
c. Distribute the questionnaire
   The distribution of the questionnaires that have been made to the respondents is carried out.
d. Tabulate the data from the questionnaire results
   At this stage the results of the questionnaire are made into tables according to the answers that have been filled in by the respondents.
e. Testing the results of the questionnaire
   At this stage, the results of the questionnaire were tested. The testing steps to be carried out are as follows [15].
   1. Creating Flowcharts
      This stage describes all the variables and relates the variables. In this stage also determine the independent and dependent variables.
   2. Measurement Model Evaluation

In this stage, there are 3 measurement steps, namely:
a) Convergent Validity Test
This stage includes calculating the average variance extracted (AVE). and outer loading . Data can be called valid if the AVE value is above 0.5 and the outer loading value is above the number 0.7 [17].
b) Discriminant Validity Test
This stage includes Fornell-Larcker and Cross Loading. Fornell-Larcker is the correlation value between the variable itself and other variables. The data can be said to be valid if the value on the variable is greater than the other variables [18]. Cross Loading is a correlation between variables and indicators. If the indicator that measures the correlation of the variable is greater than the correlation of the other variable indicators, the data is already valid [19].
c) Reliability Measurement Test
In this test, the data can be said to be valid if the Composite Reliability value is above 0.7 and Cronbach's alpha is above 0.6 [20].
3. Structural Model Evaluation
In this stage there are 2 results of the calculation, namely:
a) R-square
This value shows how much the independent variable affects the dependent variable.
b) Hypothesis Testing
At this stage, a comparison is made between the t-statistical values with the t-table, where the t-table is 0.05 or 5% and the p-value 0.05.

2.2 Framework
1. Some boarding house owners still use conventional promotional media so that only those in the surrounding area know about it and Boarding house seekers must go directly to the location of the house
2. Boarding house seekers will find it difficult and require more time to survey several boarding houses if the locations are far apart
3. Home seekers need a system that can help make a decision.

From the problems that have been identified above, the problems encountered are: how to build a boarding house provider system that is able to help boarding house seekers get complete information about boarding houses, without having to carry out surveys to live locations, able to provide decision choices for searchers boarding houses as well as being an online media for boarding house owners.
Here is the framework used:
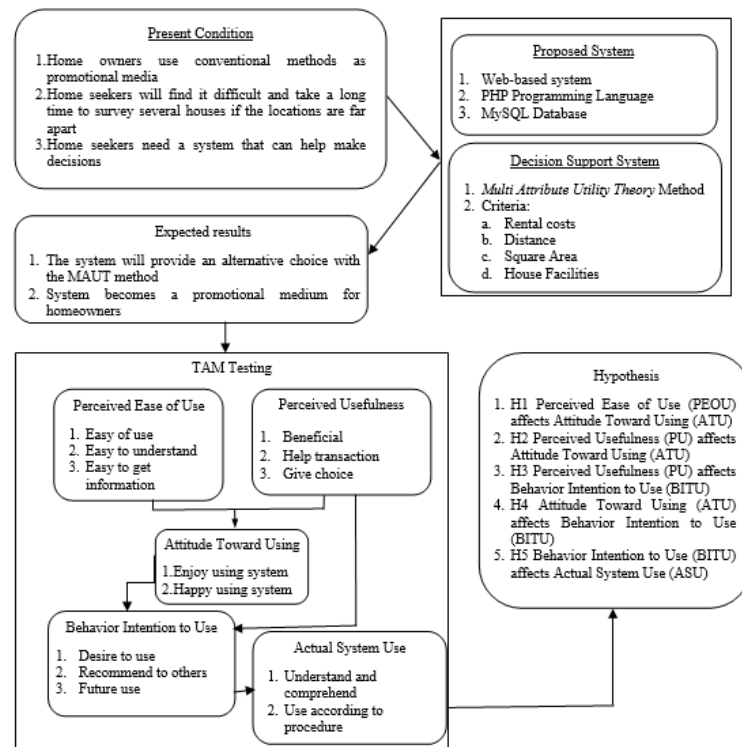
Fig. 1 Framework

III.   RESULTS

3.1 MAUT

The stages of the *Multi Attribute Utility Theory* (MAUT) method are as follows:

a. Determining Criteria
    There are 4 criteria that will be used, including cost, distance, area, and facilities

b. Weighting
    The weights are obtained from the results of interviews with 3 boarding house seekers, then the results are calculated on average. Because MAUT uses numbers 0-1, the average result is divided by 100.

The weighting can be seen in Table 1.

TABLE 1
Criteria Weight

No	Criteria	N1	N2	N3	Weight
1	Cost	50	50	40	0,47
2	Distance	20	30	20	0,23
3	Square Area	10	10	10	0,1
4	Facilities	20	10	30	0,2

c. Configure criteria value

The scoring uses a scale of 1-5 where 1 is the worst value and 5 is the best value. The results of the criteria configuration are obtained from the results of user interviews. The following table of criteria values:

TABLE 2
Criteria Value with Parameter

Criteria	Parameter	Criteria Value
Cost	<=500.000	1
	500.001 - 750.000	2
	750.001 - 1.000.000	3
	1.000.001 - 1.250.000	4
	>1.250.000	5
Distance	>4 km	1
	>3 km - 4 km	2
	>2 km – 3 km	3
	>1 km – 2 km	4
	<=1 km	5
Square Area	2 x 3 m^2	1
	3 x 3 m^2	2
	3 x 4 m^2	3
	4 x 4 m^2	4
	4 x 5 m^2	5
Facilities	1	1
	2	2
	3	3
	4	4
	>=5	5

Information: Facilities include bathrooms, mattresses, wardrobes, desks, other additional facilities.

d. Configure utility value

The utility value configuration is obtained by knowing the cost information and then assigning a number according to the parameters, as follows:

TABLE 3
Alternative Value Weighting

Name	B1	B2	B3	B4
A1	1	5	2	2
A2	5	4	5	1
A3	5	4	3	4
A4	3	5	3	3
A5	3	4	3	4

Then normalize the matrix using formula (2)

$$A1 = U(x) = \frac{1-1}{5-1} = 0 \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots \dots.(3)$$

Here are the normalization results:

TABLE 4
Normalization Results

Name	B1	B2	B3	B4
A1	0	1	0	0,3
A2	1	0	1	0
A3	1	0	0,3	1
A4	0,5	1	0,3	0,67
A5	0,5	0	0,5	1

e. Calculating the final value

In this stage the normalization results are multiplied by the preference weights and then added up using formula (1).

Here's the calculation:
A1 = (0 * 0.47) + (1 * 0.23) + (0 * 0.1) + (0.3 * 0.2)
A1 = 0.29
The final result obtained:

TABLE 5
The Final Result

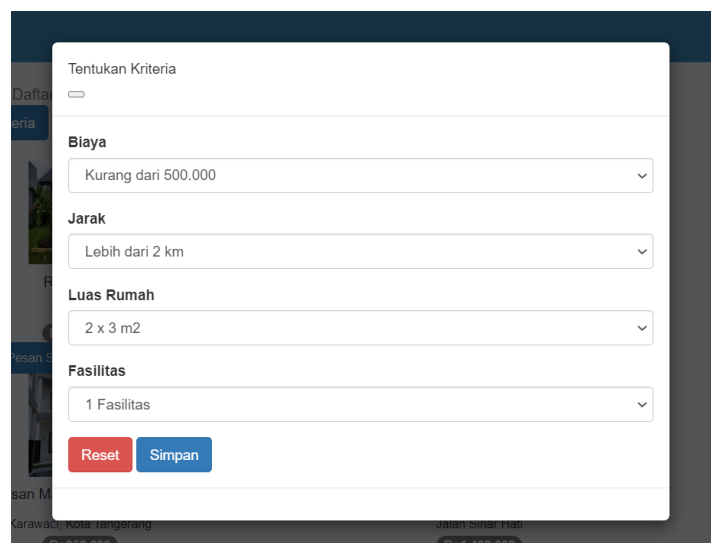| House	Result	Rank
A1	0,29	5
A2	0,57	3
A3	0,7	1
A4	0,629	2
A5	0,485	4

Fig. 2 Display MAUT Criteria

The system built is named "Kosakita", the following display determines the MAUT criteria on the Kosakita *website:*
The system that has been built is tested using *the Technology Acceptance Model* , following the steps:

a. Define variable
    The variables to be used are:
    1) Perceived Ease of Use (PEOU) is a variable of ease of use of information systems. This variable becomes the independent variable [21].
    2) Perceived Usefulness (PU) is a variable of benefits obtained from the information system. This variable becomes the independent variable [22].
    3) Attitude Toward Using (ATU) is the attitude variable towards the information system. This variable becomes the dependent variable [22].
    4) Behavior Intention to Use (BITU) is a variable of interest in information systems. This variable becomes the dependent variable [23].
    5) Actual System Use (ASU) is a variable form of use of the information system. This variable becomes the dependent variable [23].

b. Develop questionnaire indicators
    The variables that have been determined are then made indicators according to the understanding of the variables. The following indicators are used in the TAM test:

TABLE 6
Questionnaire Indicator

Variable	Indicator
Perceived Ease of Use (PEOU)	Easy to use
	Easy to understand
	Easy to get information
Perceived Usefulness (PU)	Beneficial
	Help transaction
	Give Choice
Attitude Toward Using (ATU)	Enjoy using system
	Happy using system
Behaviour Intention to Use (BITU)	Desire to use
	Recommend to others
	Future use
Actual System Use (ASU)	Uderstand and Comprehend
	Use according to procedure

c. Distribute the questionnaire
    In the questions that have been made according to the indicators, a Likert scale is given. Likert scale is a scale used to measure a person's perceptions, attitudes, and opinions [24]. The criteria will be given a number from 1 to 5, where 1 is strongly disagree, 2 is disagree, 3 is neutral, 4 is agree and 5 is strongly agree. Questionnaires were distributed via Google Form on Sunday, July 10, 2022 and closed a week later, July 17, 2022. A total of 88 respondents were obtained, where 63 boarding house seekers and 25 boarding house owners. The following is a questionnaire made according to the indicators that have been made previously.

TABLE 7
Questionnaire Question Table

	Question
	Perceived Ease of Use (PEOU)
1	I think the Kosakita website is easy to use
2	I think the language used on the Kosakita website is easy to understand
3	I think the Kosakita website provides detailed house information
	Perceived Usefulness (PU)
4	Kosakita website is useful for me
5	The Kosakita website helps me make boarding house transactions
6	The Kosakita website helps provide a choice of boarding houses according to the desired criteria
	Attitude Toward Using (ATU)
7	I enjoy using the Kosakita website
8	I feel happy looking for a boarding house using the Kosakita website
	Behavior Intention to Use (BITU)
9	I will use the Kosakita website to find a boarding house
10	I will recommend the Kosakita website to others

11	I hope to use the Kosakita website in the future
	Actual System Use (ASU)
12	I understand and comprehend how to use the Kosakita website
13	I can use the Kosakita website according to the procedure

d. Tabulate the data from the questionnaire results

The details of the answers of 88 respondents are:

TABLE 8
Table of Respondents' Answer Details

No	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13
1	5	4	5	4	4	5	5	4	4	4	4	4	4
2	4	4	5	4	4	5	4	4	4	5	5	4	4
3	4	4	4	4	4	4	4	4	5	4	4	4	4
4	5	5	4	5	5	5	5	5	5	4	5	5	5
5	4	5	5	4	4	5	5	4	5	4	4	4	5
6	5	5	5	4	5	5	5	4	5	5	5	5	5
7	4	4	4	3	3	4	4	4	3	3	4	4	4
8	5	5	4	5	5	4	4	4	4	4	5	5	5
9	5	5	5	4	5	5	5	5	5	5	5	5	5
10	4	5	4	4	4	5	5	4	4	4	5	5	5
11	5	5	4	5	4	4	4	4	3	4	4	4	4
12	4	4	3	4	4	3	4	4	4	4	4	4	4
13	5	5	4	5	5	5	5	5	5	5	5	5	5
14	5	5	4	5	5	5	4	5	4	5	5	5	5
15	5	5	5	4	5	5	4	4	4	5	5	4	5
16	5	5	5	4	5	5	5	5	4	5	4	5	4
17	4	4	4	4	4	4	4	4	4	4	4	4	4
18	5	4	4	4	4	4	4	4	4	4	5	4	4
19	5	4	4	4	5	4	4	5	4	5	5	4	4
20	5	5	5	5	5	5	5	5	5	5	5	5	5
21	4	4	4	4	4	4	4	4	4	4	4	4	4
22	5	5	4	4	4	4	4	5	4	4	4	5	4
23	4	4	4	3	4	3	3	3	4	4	3	4	3
24	5	4	5	5	4	5	5	5	5	5	4	4	4
25	5	5	5	5	5	5	5	5	5	5	5	5	5
26	5	5	4	5	5	5	5	5	5	5	5	5	5
27	5	5	5	5	5	5	4	5	5	5	5	4	4
28	4	5	5	4	5	4	4	4	4	5	5	4	5
29	4	4	3	3	4	4	3	4	3	4	4	4	4
30	5	5	5	5	5	5	5	5	5	5	5	5	5
31	5	5	5	5	5	5	5	5	5	5	5	5	5
32	5	5	5	5	5	5	5	5	5	5	5	5	5
33	5	5	5	5	5	5	5	5	5	5	5	5	5
34	4	4	4	4	4	4	4	4	4	4	4	4	4
35	4	5	4	5	4	4	4	4	4	4	3	3	5
36	4	4	4	5	4	4	4	4	4	4	4	4	4
37	4	4	5	5	5	5	4	5	5	5	5	4	4
38	5	5	5	5	5	5	5	5	5	5	5	5	5
39	4	4	4	4	4	4	4	4	4	4	4	4	4
40	5	5	4	4	5	5	5	5	5	4	5	5	5
41	4	4	4	4	4	4	3	3	3	4	4	4	4
42	5	5	5	5	5	5	5	5	5	5	5	5	5
43	4	5	4	4	4	3	5	5	4	5	5	4	4
44	5	4	3	5	5	4	3	4	5	4	5	5	4
45	5	4	5	5	4	5	5	5	4	5	4	4	5
46	4	5	5	4	5	4	4	5	4	5	4	5	3
47	5	4	4	4	4	5	4	3	5	5	4	5	5

48	5	4	3	3	2	3	1	4	2	4	5	4	5
49	5	5	5	4	5	5	5	3	5	5	5	5	5
50	4	4	4	4	4	4	3	4	4	4	3	4	4
51	5	5	5	5	5	5	5	5	5	5	5	5	5
52	5	5	5	5	5	5	5	5	5	4	5	5	5
53	4	3	5	2	3	5	3	4	3	3	4	3	4
54	5	5	5	5	5	5	5	5	5	5	5	5	5
55	4	4	5	5	5	5	4	5	5	4	4	5	4
56	4	5	5	5	5	5	5	4	5	4	5	5	5
57	4	4	3	3	3	4	3	3	3	2	3	2	3
58	4	4	4	3	5	4	4	5	3	3	4	3	3
59	4	5	2	4	2	4	2	5	4	2	4	2	4
60	5	5	5	5	5	5	5	5	5	5	5	5	5
61	5	4	4	4	3	5	4	3	4	4	4	3	5
62	5	4	4	5	4	5	4	5	4	4	5	4	5
63	4	4	4	4	4	4	4	4	4	4	4	4	4
64	5	5	4	4	5	5	5	5	4	4	4	5	5
65	5	5	5	5	5	5	5	5	5	5	5	5	5
66	5	5	5	5	5	5	5	5	4	4	4	4	4
67	5	5	4	4	5	4	4	5	4	5	5	4	5
68	5	5	5	5	5	5	5	5	5	5	5	5	5
69	4	4	4	5	5	5	4	5	5	5	5	5	5
70	5	5	5	5	5	5	5	5	5	5	5	5	5
71	5	5	5	5	5	5	5	5	5	5	5	5	5
72	5	5	5	5	5	5	5	5	5	5	5	5	5
73	5	4	4	5	4	4	4	4	4	5	4	5	4
74	4	4	5	4	5	4	4	5	5	4	5	5	4
75	4	4	4	4	5	3	4	4	3	5	4	5	4
76	5	5	4	4	4	5	5	5	4	5	4	4	5
77	5	5	4	4	5	5	5	5	4	5	4	5	4
78	4	5	4	4	4	5	4	4	4	5	5	4	4
79	5	5	5	5	4	4	5	5	5	5	5	5	4
80	3	4	4	5	5	5	5	5	4	5	3	5	4
81	4	5	4	4	4	4	4	4	4	4	4	4	4
82	5	5	5	5	5	5	5	5	5	5	5	5	5
83	5	5	5	5	5	5	5	5	5	5	5	5	5
84	5	5	5	5	5	5	5	5	5	5	5	5	5
85	5	5	5	5	5	5	5	5	5	5	5	5	5
86	4	4	4	4	4	4	4	4	4	4	4	4	4
87	3	3	4	3	3	3	3	3	3	3	3	3	3
88	5	5	5	5	5	5	5	5	5	5	5	5	5

e. Testing the results of the questionnaire

At this stage, the results of the questionnaire were tested. The testing steps carried out are as follows.
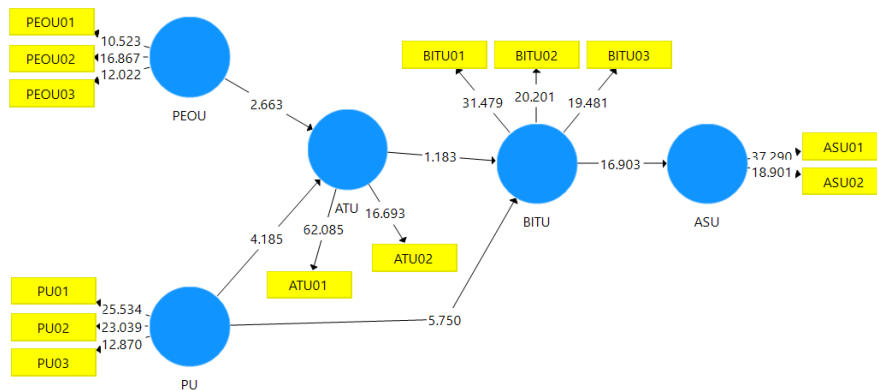1. Creating Path Diagram

Fig. 3 Path Diagram

2. Measurement Model Evaluation

    In this stage, there are 3 measurement steps, namely:

a) Convergent Validity Test

    This stage includes calculating the outer and loading average variance extracted (AVE). The following is the result of the Outer Loading calculation.

TABLE 9
Outer Loading

	ASU	ATU	BITU	PEOU	PU	Result
ASU01	0.887					Valid
ASU02	0.854					Valid
ATU01		0.901				Valid
ATU02		0.846				Valid
BITU01			0.849			Valid
BITU02			0.835			Valid
BITU03			0.822			Valid
PEOU01				0.777		Valid
PEOU02				0.825		Valid
PEOU03				0.744		Valid
PU01					0.846	Valid
PU02					0.852	Valid
PU03					0.789	Valid

The calculation results for the Average Variance Extracted (AVE) are as follows.

TABLE 10
Average Variance Extracted (AVE)

	Average Variance Extracted (AVE)	Result
ASU	0.758	Valid
ATU	0.764	Valid
BITU	0.698	Valid
PEOU	0.613	Valid
PU	0.688	Valid

b) Discriminant Validity Test

    The following is the calculation result for Fornell-Larcker.

TABLE 11
Fornell-Larcker

	ASU	ATU	BITU	PEOU	PU
ASU	0.871				
ATU	0.652	0.874			
BITU	0.814	0.717	0.835		
PEOU	0.735	0.756	0.779	0.783	
PU	0.762	0.809	0.819	0.769	0.830

As for Cross Loading is as follows.

TABLE 12
Cross Loading

	ASU	ATU	BITU	PEOU	PU	Result
ASU01	**0.887**	0.629	0.749	0.625	0.710	Valid
ASU02	**0.854**	0.500	0.665	0.658	0.612	Valid
ATU01	0.651	**0.901**	0.678	0.740	0.771	Valid
ATU02	0.473	**0.846**	0.567	0.566	0.633	Valid
BITU01	0.665	0.674	**0.849**	0.652	0.786	Valid
BITU02	0.694	0.607	**0.835**	0.657	0.678	Valid
BITU03	0.682	0.504	**0.822**	0.645	0.574	Valid
PEOU01	0.618	0.504	0.595	**0.777**	0.548	Valid
PEOU02	0.614	0.635	0.598	**0.825**	0.602	Valid

PEOU03	0.500	0.618	0.634	**0.744**	0.646	Valid
PU01	0.637	0.653	0.697	0.602	**0.846**	Valid
PU02	0.664	0.711	0.729	0.653	**0.852**	Valid
PU03	0.594	0.647	0.606	0.663	**0.789**	Valid

c) Reliability Measurement Test

The results of the calculation of Cronbach's Alpha and Composite Realibility are as follows.

TABLE 13
Cronbach's Alpha and Composite Realibility

Indicator	Cronbach's Alpha	Composite Reliability	Result
ASU	0.682	0.862	Valid
ATU	0.693	0.866	Valid
BITU	0.784	0.874	Valid
PEOU	0.685	0.826	Valid
PU	0.773	0.869	Valid

3. Structural Model Evaluation

In this stage there are 2 results of the calculation, namely:

a) R-square

Based on the results of the R-square calculation, the PEOU and PU variables affect the ATU variable by 69.8%. Then the ATU and PU variables affect the BITU variable by 67.9% and the BITU variable affects the ASU variable by 66.2%. The following is the result of the R-square calculation.

TABLE 14
R-Square

	R Square	Percentage
ASU	0.662	66,2%
ATU	0.698	69,8%
BITU	0.679	67,9%

b) Hypothesis Testing

The t-table in this test is calculated from the number of respondents (n) - the number of variables is equal to 88-5 the result is 83. So the t-table is 1.9894. With p-value 0.05. The following is t-count with p-values for each hypothesis

TABLE 15
Table T-statistics and p-values

	T Statistics (|O/STDEV|)	T-table	P Values
ATU -> BITU	1.183	1,9894	0.237
BITU -> ASU	16.903	1,9894	0.000
PEOU -> ATU	2.663	1,9894	0.008
PU -> ATU	4.185	1,9894	0.000
PU -> BITU	5.750	1,9894	0.000

Here are the results of hypothesis testing:

H1: Perceived Ease of Use (PEOU) has an influence on Attitude Toward Using (ATU). Based on table 4.15, the t-statistic is greater than the t-table, namely 2.66 3 > 1.9894. And the p-values are 0.008 0.05.

H2: Perceived Usefulness (PU) has an influence on Attitude Toward Using (ATU). Based on table 4.15, the t-statistic is greater than the t-table, which is 4.185 > 1.9894. And the p-values are 0.000 0.05.

H3: Perceived Usefulness (PU) has an influence on Behavior Intention to Use (BITU). Based on table 4.15, the t-statistic is greater than the t-table, namely 5.750 > 1.9894 . And the p-values 0.05

H4: Attitude Toward Using (ATU) has no effect on Behavior Intention to Use (BITU). Based on table 4.15 the t-statistic is smaller than the t-table, namely 1.1 83 < 1.9894. And the p-values 0.237 > 0.05.

H5: Behavior Intention to Use (BITU) has an influence on Actual System Use (ASU). Based on table 4.15, the t-statistic is greater than the t-table, which is 16.903 > 1.9894. And the p-values are 0.000 0.05.

IV. CONCLUSIONS

After doing research, it can be concluded that based on the results of the Technology Acceptance Model test, the Perceived Ease of Use (PEOU) indicator has an influence on Attitude Toward Using (ATU) because the t-statistical result is 2.660, the Perceived Usefulness (PU) indicator has an influence on Attitude Toward Using (ATU) because the result of the t-statistic calculation is 4.218. Then the Behavior Intention to Use (BITU) indicator has an influence on the Actual System Use (ASU) because the results of the t-statistical calculation are 16,122 and the Perceived Usefulness (PU) indicator has an influence on the Behavior Intention to Use (BITU) where the t-statistic calculation results are 4,218. Meanwhile, the Attitude Toward Using (ATU) indicator has no influence on the Behavior Intention to Use (BITU) because the t-statistic result is only 1.179, which means it is below 1.9894..

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