

## **ANALYSIS OF GRABAG GUIDE APPLICATION ACCEPTANCE FOR INTRODUCTION TO TOURIST ATTRACTIONS USING THE TECHNOLOGY ACCEPTANCE MODEL (TAM)**

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### **Abstract**

*This research aims to analyze application user acceptance of the tourism introduction Android application in Grabag District, Magelang Regency using three (3) variables contained in the TAM (Technology Acceptance Model) model, namely Attitude towards Use, Perception of Ease of Use and Perception of Usefulness. This research needs to be carried out to resolve the problem of application acceptance which has an impact on the level of tourist visits, so that later application development and improvements can be carried out according to needs. The respondents used were 81 users consisting of sub-district officers, business or tourism owners and tourists. To obtain data whose validity and reliability have been tested and then analyzed using multiple linear regression techniques, a data collection method using a questionnaire was used. The results of the analysis of the 1st regression equation show that the Perception of Usefulness variable (X1) has a significant influence on the Attitude towards Use variable (Y). The Perception of User Ease variable (X2) has a significant influence on the Attitude towards Use variable (Y). The results of the analysis of the 2nd regression equation show that variables X1 and X2 together have a significant influence on Attitude to Use (Y).*

**Keywords:** acceptance, android, application, TAM, tourism.

## **1. INTRODUCTION**

The Android application for introducing tourist attractions in Grabag District or what can be called the Grabag Guide has just been implemented at the request of the Grabag District with the main aim of increasing the number of tourist visits in Grabag District, where previously there has never been or has never been a similar application made in the tourism sector in this district. Apart from that, the aim of creating this application is to accommodate tourism potential so that it can be recorded and can be utilized by business actors in the tourism sector. Because this application is being implemented and created for the first time, it is necessary to carry out an acceptance analysis to see whether the new application can be used properly in accordance with the initial purpose of creating this application [1].

Implementation of an Android application introducing new tourist attractions can generate feedback from users of the application. Feedback from users can be in the form of acceptance of the new system or even rejection of it [2]. Technology user satisfaction is an important indicator in determining success in designing and implementing technology. Then the level to which someone believes that using technology is easy and does not require much effort from the user as well as the level

of someone's belief that using certain technology will improve their performance. Apart from the above, a person's level of use of a technology can be predicted from their attention to the technology, such as the desire to add supporting features and motivation to continue using it [3].

Previous research that has been carried out is to measure user satisfaction with tourism applications in Brebes Regency, using the TAM model by adding user trust and risk variables. Data analysis uses structural equation modeling. The results of this research show that the model fits with chi 3 which is not significant and the goodness of fit indicators are very good [4]. The next research is to compare the TAM and TPB methods in evaluating the application of the JKN Mobile Application to BPJS participants in Purwakarta Regency with the conclusion that from the comparison of the TPB and TAM methods, the TAM method is better for evaluating the application of the JKN Mobile Application to BPJS participants in Purwakarta Regency because it details explaining the successful implementation of the JKN Mobile Application [5]. Then the research with the title Analysis of the Technology Acceptance Model (TAM) on the Use of the PLN Daily Application (Empirical Study of PLN UP3 Tegal Employees), has been well accepted by employees who apply it both individually and in groups using the TAM method

analysis as a system acceptance model. Training on the system used and implemented provides positive results. [6]. Several models are recommended to explain the acceptance of information technology and the results show that the TAM model is considered the best model for analyzing technology acceptance for users with the components of attitude toward use, perception of usefulness and perceived ease of use. [7].

Referring to the background and several studies above, we can determine the model that will be used to determine the level of user acceptance of the Android application to introduce tourist attractions in Grabag District, namely the TAM model. Because several previous studies explained that the best way to measure the level of system acceptance is to use the TAM model with the research hypothesis that the attitude toward use component will be influenced by perception of usefulness and perceived ease of use. Then the results of this research can be used as recommendations for developing existing applications.

## 2. RESEARCH METHOD

The research method used is the Technology Acceptance Model (TAM) developed by Davis (1989) which aims to explain how users view and use technology [8], [9]. The Technology Acceptance Model (TAM) describes the process related to motivation between the application and the user. Whether the application used is in accordance with the organization's internal needs or not and to what extent users actually utilize existing applications. The basic concept of TAM can be seen in Figure 1.

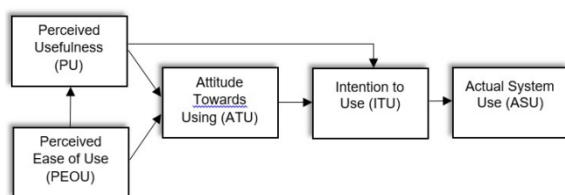


Figure 1. TAM Concept

The application acceptance model in TAM shown in Figure 1 represents a cause and effect relationship. applications are represented using a set of "design feature" variables. According to this model, the overall attitude of potential users to provide hypotheses regarding the use of a given application. There are two perceptions that are the main beliefs: perceived usefulness and perceived ease of use. TAM provides a knowledge base to determine user behavior regarding application use [10]. There are several main variables that are reviewed in this Technology Acceptance Model (TAM), namely acceptance of existing applications (Perceived Usefulness), ease of use (Perceived Ease of Use) [11], user behavior (Attitude Towards Using), user desires (Intention to Use), Actual System Use.

Perceived usefulness is "the degree to which a person believes that using a particular system would enhance his or her job performance" [12]. Perceptions that describe the extent to which the application gives users confidence in providing benefits to their work. Applications that have high benefits make users believe that there is a relationship between the user and the performance shown.

Perceived ease of use is "the degree to which a person believes that using a particular system would be free of effort" [12]. A perception that shows that the user believes that the application is easy to understand, easy to use and does not require special training to operate it.

Attitude Toward Using shows the perception of the user's behavior after using the application, which shows an attitude of liking or disliking it. In this case Davis[9] found attitude was a partial mediator of the influence of perceived usefulness on users' intention to use the app, and that it added little causal explanatory power.

Intention to Use (ITU). A person's desire to use technology is due to the belief that the information technology used will develop the performance of that person or an organization. An individual's intention to use technology can be measured and it can predict actual behavior [13].

One thing that is seen from a technology application is the quality of the content, which is the reason for using the application [13]. The quality of the content has a significant effect on the perceived benefits of the application and will increase the desire to continue using the existing application.

If an application is designed with a good and complete appearance, users will feel that using the application is easy. Apart from that, good application design can meet the needs of different users and ease access to the application. So, users will feel more benefits from the application [14].

The Technology Acceptance Model (TAM) application acceptance model is the model that will be implemented in this research. This research uses quantitative methods with survey research. The research objects and categories of respondents are sub-district employees, tourism businesses and tourists who have used the Android application for introducing tourist attractions. The research instrument used a questionnaire with questions using a 1-5 Likert scale. The way to collect data is by distributing questionnaires to users of the application. Data analysis was carried out with the help of SPSS software which was processed using descriptive analysis techniques and multiple linear regression techniques [15].

The data collection method in this research was carried out by obtaining processed data from respondents' answers to questionnaires. The process of creating a questionnaire refers to the components contained in the Technology Acceptance Model (TAM). Next, determining the number of respondents

refers to the number of sub-district employees, tourism businesses and tourists who have used the Android application for introducing tourist attractions, totaling 430 people. Then the number of respondents who will fill out the questionnaire is calculated using the Taro Yamane calculation method in the following way:

$$n = \frac{N}{N.d^2+1} \tag{1}$$

(n = Sample size)  
 (N = Population size)  
 (d = Precision, set at 10% with a confidence level of 95% of the 305 existing population)

$$= \frac{430}{(430 \times (0,1)^2 + 1)}$$

$$= \frac{430}{(430 \times 0,01) + 1}$$

$$= 81,1320755$$

It can be seen from the sampling formula above that the sample size based on the population of this study is 81 people. Validity tests are carried out to see which question items are appropriate (representative) to be used to represent research variables. Apart from having to be valid, the instrument must also be reliable.

Next is the data analysis method. Analysis was carried out in descriptive form using SPSS software to obtain mean values and percentages. Descriptive statistical analysis is carried out by changing raw data into a form that is easier to understand and interpret. This analysis provides an overview or description of the data. For analysis, data collection is done through the questionnaire stage, namely by referring to the components in the Technology Acceptance Model (TAM). The next step is to manage the data that has been obtained using descriptive analysis techniques and multiple linear regression analysis techniques.

The type of data measurement used is a Likert scale. The scale used is five Likert scales with the provisions: Strongly Agree (SS), Agree (S), Neutral (N), Disagree (TS), Strongly Disagree (STS) [19].

**2.1. Research Flow**

This research will be carried out in accordance with the research flow that has been planned so that it can run smoothly and with the right results. The following is a picture of the flow of research carried out.

The first step is to formulate the problem of the research to be carried out, then a literature review is carried out by means of a study of literature/journals that are relevant to the research being carried out. The second is collecting data by interviewing sources and distributing questionnaires to predetermined respondents. The third is data processing using the

multiple linear regression method with the steps taken in it being validity and reliability testing and hypothesis testing.

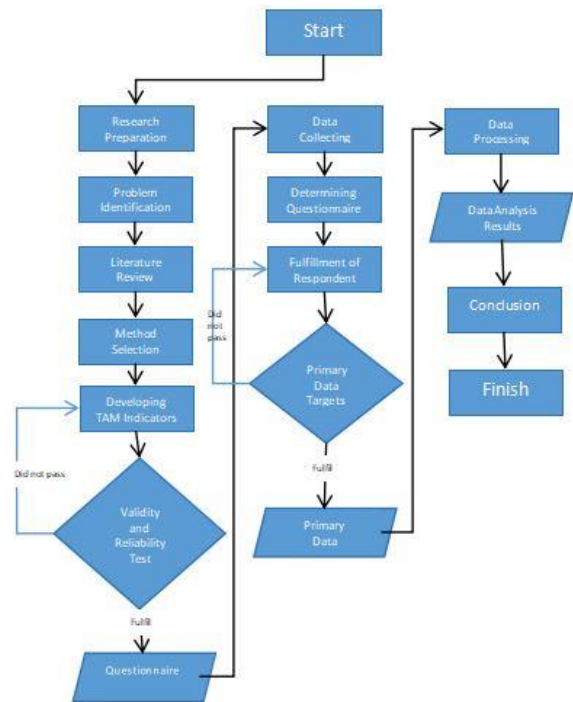


Figure 2. Research Flow

**3. RESULT AND DISCUSSION**

In this section, the results of research instrument testing, analysis prerequisite test results, regression model estimation and hypothesis testing results will be explained. The research instrument test results consist of the test results for the validity of instrument items and the reliability of the instrument, the test results for prerequisite analysis include the results of residual normality tests, heteroscedasticity. The regression model estimation results report the results of the analysis of the two proposed regression equation models. Hypothesis testing results report the results of testing the proposed hypothesis.

**3.1. Validity of Instrument Items**

The first discussion is that the validity of instrument items is used to determine how precisely a measuring instrument is able to perform its function. The measuring tool that can be used in testing a questionnaire is the correlation number between the statement score (item score) and the overall score (total score) of the respondent's statements regarding the information in the questionnaire [15].

External validity testing uses the number (r) of Pearson correlation results known as the Product Moment correlation formula [16]. In validity estimation, in general, a very high coefficient cannot be required. A validity coefficient that is not so high around 0.50 would be acceptable and considered satisfactory. However, if the validity coefficient is

less than 0.30, it is usually considered unsatisfactory [17].

This research uses three instruments that will be validated before being used to collect data, namely the Attitude toward Using (AT, as Y), Perceived Usefulness (PU, as X1), and Perceived Ease of Use (PE, as X2) instruments. Calculation of the validity of the instrument in the form of a questionnaire with an internal consistency approach using SPSS software. Based on the calculation results, if the corrected item-total correlation value is  $\geq 0.30$ , the statement item in the questionnaire is declared valid or valid [17]. The results of the instrument test using the corrected item-total correlation method are as follows.

The Attitude toward Using variable was measured using an instrument consisting of 7 questions. The following are the results of the validity of the items in Table 1.

Table 1. Validity Results of the Attitude Toward Using Instrument

Items	Item-Total Correlation	Minimum Requirements	Information
AT1	0,375	0,300	Valid
AT2	0,325	0,300	Valid
AT3	0,390	0,300	Valid
AT4	0,410	0,300	Valid
AT5	0,410	0,300	Valid
AT6	0,425	0,300	Valid
AT7	0,420	0,300	Valid

Table 1 shows correlation coefficients ranging from 0,325 (item AT2) to 0,425 (AT6). Because the item-total correlation coefficient is greater than 0,300, it can be concluded that all items are valid.

Next is the Perceived Usefulness variable measured by an instrument consisting of 7 statement items, namely PU1 to PU7. The following are the results of the validity of the items in Table 2.

Table 2. Validity Results of the Perceived Usefulness Instrument

Items	Item-Total Correlation	Minimum Requirements	Information
PU1	0,345	0,300	Valid
PU2	0,370	0,300	Valid
PU3	0,390	0,300	Valid
PU4	0,335	0,300	Valid
PU5	0,390	0,300	Valid
PU6	0,380	0,300	Valid
PU7	0,395	0,300	Valid

Table 2 shows correlation coefficients ranging from 0,345 (item PU1) to 0,395 (PU7). Because the item-total correlation coefficient is greater than 0,300, it can be concluded that all items of the perceived usefulness instrument are valid.

Next, the Perceived Ease of Use variable is measured using an instrument consisting of 7 statement items as follows.

Table 3 shows the item-total correlation coefficients ranging from 0,360 (PE1) to 0,415 (PE6). Because the item-total correlation coefficient is greater than 0,300, it can be concluded that all items of the perceived ease of use instrument are valid.

Table 3. Validity Results of the Perceived Ease of Use Instrument

Items	Item-Total Correlation	Minimum Requirements	Information
PE1	0,360	0,300	Valid
PE2	0,400	0,300	Valid
PE3	0,380	0,300	Valid
PE4	0,395	0,300	Valid
PE5	0,355	0,300	Valid
PE6	0,415	0,300	Valid
PE7	0,390	0,300	Valid

### 3.2. Instrument Reliability

The second discussion is Instrument Reliability. Instrument reliability testing is used to determine the consistency or regularity of the measurement results of an instrument if the instrument is used again as a measuring tool for an object or respondent [18]. One method of testing reliability is to use the Alpha-Cronbach method [18]. An instrument is said to be reliable if it has a Cronbach Alpha coefficient  $\geq 0.70$ . The following are the results.

Table 4. Instrument Reliability Test Results

Instrument	Alpha Cronbach	Minimum Requirements	Information
Perceived Usefulness	0,750	0,70	Reliable
Perceived Ease of Use	0,790	0,70	Reliable
Attitude toward Using	0,795	0,70	Reliable

Table 4 shows that the three research instruments have a level of reliability that meets the requirements for use in obtaining research data in the field. These three instruments have a Cronbach's Alpha coefficient  $> 0.70$ .

### 3.3. Descriptive Analysis

The third discussion is about Descriptive Analysis. Functioned to explain each variable studied, namely Perceived Usefulness, Perceived Ease of Use and Attitude toward Using. Descriptive analysis in this research includes presenting the mean (average value) and also categorizing data into very low, low, medium, high and very high categories for each variable. To find out respondents' tendencies, groupings are made based on norms arranged according to the desired level of differentiation and limits are set based on the theoretical minimum-maximum score range. The categorization or classification norms used are [19]:

Table 5. Categorization Norms

Information	Theoretical Mean	Equality	Standard Deviation
Very low	Mt - 1,5 SDt	$\geq X$	
Low	Mt - 0,5 SDt	$\geq X >$	Mt - 1,5 SDt
Currently	Mt + 0,5 SDt	$\geq X >$	Mt - 0,5 SDt
High	Mt + 1,5 SDt	$\geq X >$	Mt + 0,5 SDt
Very high		$X >$	Mt + 1,5 SDt

Mt is the mean or theoretical average, obtained from adding up the theoretical maximum score and

the theoretical minimum score, then dividing by two or  $Mt = (\text{Maximum Score} + \text{Minimum Score})/2$ . Meanwhile, SDt is the theoretical standard deviation obtained from the theoretical maximum score minus the theoretical minimum score and divided by six or  $SDt = (\text{Maximum Score} - \text{Minimum Score})/6$ .

The instruments for the four variables in this study were measured on a 5 point scale which has a range of answer choices from 1 to 5, so the highest or maximum score = 5 and the lowest or minimum score = 1. The theoretical mean (Mt) was obtained as  $(5 + 1)/2 = 3$  and a theoretical standard deviation (SDt) of  $1/7 \times (5 - 1) = 0.67$ . Based on the theoretical mean and theoretical standard deviation, a classification can be determined with 5 categories based on the following norms:

Table 6. Classification Based on Categorization Norms

Information	Theoretical Mean	Equality	Standard Deviation
Very low	$3 - (1,5 \times 0,57)$	$\geq X$	$3 - (1,5 \times 0,57)$
Low	$3 - (0,5 \times 0,57)$	$\geq X >$	$3 - (0,5 \times 0,57)$
Currently	$3 + (0,5 \times 0,57)$	$\geq X >$	$3 + (0,5 \times 0,57)$
High	$3 + (1,5 \times 0,57)$	$X >$	$3 + (1,5 \times 0,57)$

Table 7. Classification of Instrument Values

Information	Theoretical Mean	Equality	Standard Deviation
Very low	2,145	$\geq X$	2,145
Low	2,855	$\geq X >$	2,855
Currently	3,145	$\geq X >$	3,145
High	4,855	$\geq X >$	4,855
Very high		$X >$	

The mean of the perceived usefulness variable is 4,15 which is in the "high" category, with a standard deviation of 0,600. Obtained categories in Table 8.

Table 8. Categorization of Perceived Usefulness Variables

	Frequency	Percent	Percent Valid	Comulative Percent
Currently	19	23.45	23.0	20.0
High	51	63.75	64.0	60.0
Very high	11	12.8	13.0	100.0
Total	81	100.0	100.0	

Table 8 shows that 51 (64%) respondents gave a "high" assessment of perceived usefulness, followed by 19 (23%) gave a "currently" and 11 (13%) gave a "very high" assessment of perceived usefulness.

Next is the mean of the perceived ease of use variable of 3,95 which is in the "high" category, with a standard deviation of 0,515. Obtained categories in Table 9.

Table 9. Categorization of Perceived Ease of Use Variables

	Frequency	Percent	Percent Valid	Comulative Percent
Currently	16	19.75	20.0	20.0
High	50	61.73	62.0	60.0
Very high	15	18.52	18.0	100.0
Total	81	100.0	100.0	

Table 9 shows that 50 (62%) respondents gave a "high" assessment of perceived ease of use, followed by 16 (20%) gave a "currently" and 15 (18%) gave a "very high" assessment of perceived ease of use.

Then the mean of the attitude toward using variable is 4,00 which is included in the "high" category, with a standard deviation of 0,500. Obtained categories in Table 10.

Table 10. Categorization of Attitude Toward Using Variables

	Frequency	Percent	Percent Valid	Commutative Percent
Currently	8	9.89	10.0	20.0
High	52	64.19	64.0	60.0
Very high	21	25.92	26.0	100.0
Total	81	100.0	100.0	

Table 10 shows that 52 (64%) respondents gave a "high" assessment of attitude toward using, followed by 21 (26%) gave a "very high" assessment of attitude toward using.

### 3.4. Analysis Prerequisite Test

The fourth discussion is the analysis prerequisite test used to determine and test the feasibility of regression analysis, the forms are the residual normality test, multicollinearity test and heteroscedasticity test.

The first is the Residue Normality Test Results. The normality test aims to test whether in the regression model, the confounding or residual variables have a normal distribution. If the residuals have a normal distribution, the regression model will be able to provide more accurate predictions. In this study, the residual normality test was carried out using the nonparametric Kolmogrov-Smirnov (K-S) statistical test to test the normality of the residuals. The basis for decision making for statistical tests with Kolmogorov-Smirnov Z (1-Sample K-S) is [23]: 1. If the value of Asymp. Sig. (2-tailed) is less than 0.05, then H0 is rejected. This means that the residual data is not normally distributed. 2. If the Asymp. Sig. (2-tailed) is more than 0.05, then H0 is accepted. This means that the residual data is normally distributed [20].

Table 11 below is the result of normality testing with the Kolmogorov-Smirnov Z test (1-Sample K-S) which presents the Kolmogorov-Smirnov Z value and p significance value.

Table 11. Residue Normalization Test Results

	Unstandardized Residual
N	81
Normal Parameters	Mean .000000
Std. Deviation	.222987
Most Extreme Differences	Absolute .118
	Positive .088
	Negative -.118
Kolmogorov-Smirnov Z	1.070
Asymp. Sig. (2-tailed)	.118

Table 11 shows the value of Asymp. Sig. (2-tailed) is 0.118 and the significance value is greater than the 0.05 significance level. Thus H0 is accepted, which means the residual data has a normal distribution.

Second is the Multicollinearity Test Results. The multicollinearity test aims to test whether in the regression model there is too high a correlation between the independent variables. A good regression model should not have too high a correlation (> 0.9) between the independent variables. To detect whether there is multicollinearity, it can be seen from the tolerance value and its opposite the variance inflation factor (VIF). These two measures show which of each independent variable is explained by other independent variables. Tolerance measures the variability of a selected independent variable that is not explained by other independent variables. So a low tolerance value is the same as a high VIF value (because  $VIF = 1/Tolerance$ ). The cutoff value that is commonly used to indicate the presence of multicollinearity is a tolerance value > 0.10 or the same as a VIF value < 10 [21]. The results of the multicollinearity test using the VIF and Tolerance values are shown in Table 12 below.

Table 12. Multicollinearity Test Results

Model	Unstandardized Coefficients		Col-linearity Statistic	
	B	Std. Error	Tolerance	VIF
1 (Constant)				
Perceived Usefulness	-.434	.493		
Perceived Ease of Use	.844	.100	.765	2.125
Use	.344	.100	.788	2.115

Table 12 shows that the tolerance values for the variables perceived usefulness and perceived ease of use are 0.765 and 0.788 respectively. Because these values are above the cut-off value of 0.10, it can be concluded that the regression model does not contain a multicollinearity problem. Likewise, if we look at the VIF values of the independent variables, respectively, they are 2.125 and 2.115, which are below the cut-off value of 10.00. Because the VIF value is below 10.0, it can be concluded that the regression model does not contain a multicollinearity problem.

The third is the results of the heteroscedasticity test. The heteroscedasticity test aims to test whether in the regression model there is an inequality of variance from the residuals of one observation to another. If the variance from the residuals from one observation to another remains the same (or is close to the same) then the model is said to be in homoscedasticity and if it is different it is called heteroscedasticity. A good regression model is a model that does not have heteroscedasticity problems, so that the variance from the residuals from one observation to another is close to the same [21]. In this study, the Glejser test was used by regressing the residual absolute value variable (AbsUt) against all

independent variables in the model. Variable measurements are said to be free from heteroscedasticity, which can be seen from the probability of significance. If the significance level is above 5%, it can be concluded that the regression model does not contain heteroscedasticity problems. Table 13 shows the results of heteroscedasticity testing.

Table 13. Heteroscedasticity Test Results

Model	Unstandardized Coefficients		Standardized Coefficients		1	Sig.
	B	Std. Error	Beta	Beta		
1 (Constant)						
Perceived Usefulness						
Perceived Ease of Use	.366	.300			3.100	.030
Ease of Use	-.025	.050	-.050	-.050	-.280	.315
Use	-.025	.050	-.050	-.050	-.290	.305

Table 13 shows that the significance value of p for the variables perceived usefulness and perceived ease of use is 0.315 and 0.305 respectively. This significance value is proven to be greater than 0.05 so it can be concluded that the regression model studied does not contain heteroscedasticity problems.

The fifth discussion is the estimation of the regression model which can be explained in the form of a multiple linear regression equation, namely:

$$Y = a_1 + b_1 X_1 + b_2 X_2 + e \tag{2}$$

Information:

- Y : Attitude toward using
- X<sub>1</sub> : Perceived usefulness
- X<sub>2</sub> : Perceived ease of use
- A : Regression constant
- b<sub>1</sub>, b<sub>2</sub> : Regression coefficient
- E : Residue or error terms

The multiple linear regression equation in this research can be generated by entering constant values and regression coefficients into the equation. The constant values and regression coefficients can be seen from the SPSS output results for the regression equation coefficients which can be seen in Table 14 below

Table 14. Regression Constants and Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients		1	Sig.
	B	Std. Error	Beta	Beta		
1 (Constant)						
Perceived Usefulness						
Perceived Ease of Use	-.425	.280			2.225	.030
Ease of Use	.675	.211	.500	.500	5.540	.035
Use	.185	.115	.500	.500	2.115	.030

Then the Coefficient of Determination ( $R^2$ ) essentially measures how far the model's ability is to explain variations in the dependent variable. The  $R^2$  value is between zero and one. A small  $R^2$  value means that the ability of the independent variables to explain the dependent variable is very limited. A value close to one means that the independent variables provide almost all the information needed to predict variations in the independent variable [22], [23], [24].

The SPSS output for the  $R^2$  value shows a value of 0.554. This figure shows that 0.554 or 55.4% of the variation or change in the dependent variable Attitude toward Using can be explained by the independent variables  $X_1$  (Perceived Usefulness) and  $X_2$  (Perceived Ease of Use), while the remaining 38.2% is influenced by other variables outside regression model used.

And finally, the results of hypothesis testing are based on the significance value of  $p$  which can be seen in Table 15 below.

Table 15. Hypothesis Testing Results

Variable	t count	Significance p	Impact
Perceived Usefulness ( $X_1$ )	3,950	0,033	Significant
Perceived Ease of Use ( $X_2$ )	3,900	0,031	Significant

Dependent variable: Y (Attitude toward using)  
Calculated F statistical value = 31,115 (significance  $p = 0,03$ )

The hypothesis testing criterion used is if the  $p$  significance value for the statistical  $t$  value is  $> 0.05$ , then the hypothesis is rejected. Meanwhile, testing the simultaneous influence of the two variables  $X_1$  and  $X_2$ . The results of hypothesis testing are presented as follows:

- H1 : Attitude toward Using the tourism introduction Android application is influenced by Perceived Usefulness which is **accepted** because  $t = 3.950$  with a significance of  $p = 0.033 (< 0.05)$ .
- H2 : Attitude toward Using the tourism introduction Android application is influenced by Perceived Ease of Use and is **accepted** because  $t = 3.900$  with a significance of  $p = 0.031 (< 0.05)$ .
- H3 : Attitude toward Using the tourism introduction android application is influenced by Perceived Usefulness and Perceived Ease of Use which is **accepted** because the calculated F statistical value = 31.115 with a significance of  $p = 0.03 (< 0.05)$ .

#### 4. DISCUSSION

In this study, the division of 81 respondents consisting of sub-district employees, business or tourism owners, and tourists was based on the initial data source, namely 430 people who were then sampled using the Taro Yamane method. The

percentage distribution is sub-district employees: 18.18% (15 respondents), business or tourism owners: 36.37% (29 respondents) and tourists: 45.45% (37 respondents), the total number of respondents is 81 people. In previous research which had a similar topic to this research with the title Analysis of User Satisfaction of the Brebes Tourism Application Using the Technology Acceptance Model (TAM) Method, it was explained that the problem faced in this research was the ease of users in using the application and finding information about tourism in the district. Brebes. In this study there were 2  $t$  tests (partial) and  $f$  test (simultaneous), in the partial test only the behavioral intention variable (independent variable) had an influence on the attitude toward using variable (dependent variable) producing a significance value of  $0.005 < 0.05$  and a value of  $t$ -count  $2.893 > 1.992$ , then in simultaneous testing all the independent variables in the study had an effect on the dependent variable resulting in a significance value of  $0.000 < 0.05$  and an  $f$ -count value of  $8.343 > 2.49$ . The end result is an application created that can help tourists find information more quickly, easily and efficiently [4]. This is in line with the results of research conducted by the author which proves that the tourism introduction application in Grabag sub-district is acceptable and makes it easier to search for tourist information.

Then the next previous research is about the Analysis of Acceptance of Tourism Promotion Applications on the SIHACI Application, a problem analysis was carried out using the Technology Acceptance Model (TAM) which has three factors of technology acceptance, namely the perceived usefulness factor, perceived ease of use (perceived ease of use), and perceived risk on intention to use. The results of the analysis show that there are several factors for the success of information systems which are demonstrated through system quality, information quality, service quality, use, user satisfaction and net benefits. The conclusion of this research is that basically the aim of the tourism information system is to make it easier for potential tourists to obtain various information about tourism located in Cianjur Regency as well as being a promotional place so that the existence of tourism in Cianjur Regency is known to local and foreign tourists [25]. This is also directly proportional to the results and objectives of the research analysis of acceptance of the Android application for introducing tourism to Grabag District which can increase tourism promotion in the area.

Then the third similar research is about analyzing the use of QRIS in the tourism support sector in the West Sumatra tourist destination area using the Technology Acceptance Model (TAM) method approach (survey of West Sumatra tourists). Purposive sampling technique. The data analysis method uses Structural Equation Modeling - Partial Least Square (SEM-PLS). The research results show that perceived usefulness has a significant effect on

behavioral intention to use QRIS. Perceived ease of use has a significant effect on behavioral intention to use QRIS. Perceived usefulness has a significant effect on attitude toward using QRIS. Perceived ease of use has a significant effect on attitude toward using QRIS. Attitude toward using has a significant effect on behavioral intention to use QRIS. Perceived usefulness does not have a significant effect on behavioral intention to use through attitude toward using QRIS. Perceived ease of use has a significant effect on behavioral intention to use through attitude toward using QRIS [26]. This research has similarities and differences with the research conducted by the author, the similarities are regarding the methods and parameters used. However, there is a difference in that the results of this research have parameters that do not meet, namely Perceived usefulness does not have a significant effect on behavioral intention to use through attitude toward use. This proves that not all application implementations can be well received by users, there are many factors that can determine the level of user acceptance of an application.

## 5. CONCLUSION

From this research it can be concluded that perceived usefulness, perceived ease of use, and attitude toward use are in the "high" category. This shows that the Android Application for Introduction to Tourism in Grabag District is considered good by application users. Then Attitude toward Using the Tourism Introduction Android application was significantly influenced by Perceived Usefulness. Attitudes towards use will increase when the usefulness that appears increases because  $t = 3.950$  with a significance of  $p = 0.033 (< 0.05)$ . Then Attitude toward Using the Tourism Introduction Android application was significantly influenced by Perceived Ease of Use. Attitudes towards use will increase when the system is perceived as easier by users because  $t = 3.900$  with a significance of  $p = 0.031 (< 0.05)$ . And finally, Attitude toward Using the Android application Introduction to Tourism is significantly influenced by Perceived Usefulness and Perceived Ease of Use. So that Attitude toward Using is continuously influenced by the variables perceived usefulness and perceived ease of use sequentially with the calculated statistical value  $F = 31.115$  with a significance of  $p = 0.03 (< 0.05)$ .

## REFERENCES

- [1] Y. W. S. Putra *et al.*, *Pengantar Aplikasi Mobile*. Penerbit Widina, 2023.
- [2] A. M. Dawis *et al.*, *REKAYASA PERANGKAT LUNAK PANDUAN PRAKTIS UNTUK PENGEMBANGAN APLIKASI BERKUALITAS*. Penerbit Widina, 2023.
- [3] H. Rafique, A. O. Almagrabi, A. Shamim, F. Anwar, and A. K. Bashir, "Investigating the acceptance of mobile library applications with an extended technology acceptance model (TAM)," *Comput Educ*, vol. 145, p. 103732, 2020.
- [4] B. A. Stefany, F. M. Wibowo, and C. Wiguna, "Analisis Kepuasan Pengguna Aplikasi Wisata Brebes Dengan Metode Technology Acceptance Model (TAM)," *Journal of Information Systems and Informatics*, vol. 3, no. 1, pp. 172–184, 2021.
- [5] W. Khairunnisa, M. A. Komara, and I. Kurniawan, "ANALISIS PENERIMAAN PENGGUNA APLIKASI MOBILE JKN PADA PESERTA BPJS KESEHATAN DI KABUPATEN PURWAKARTA DENGAN MENGGUNAKAN METODE COMBINED TECHNOLOGY ACCEPTANCE MODEL AND THEORY OF PLANNED BEHAVIOR (C-TAM-TPB)," *JATI (Jurnal Mahasiswa Teknik Informatika)*, vol. 7, no. 3, pp. 1445–1451, 2023.
- [6] A. Pratama, S. Z. Wulandari, and D. L. Indyastuti, "Analisis Technology Acceptance Model (TAM) Pada Penggunaan Aplikasi PLN Daily (Studi Empiris Pada Pegawai PLN UP3 Tegal)," *INOBIS: Jurnal Inovasi Bisnis dan Manajemen Indonesia*, vol. 5, no. 3, pp. 355–368, 2022.
- [7] N. S. Mardhiyah, M. Rusydi, and P. C. Azwari, "Analisis technology acceptance model (TAM) terhadap penggunaan aplikasi gojek pada mahasiswa di kota palembang," *Esensi J. Bisnis dan Manaj*, vol. 10, no. 2, pp. 173–180, 2021.
- [8] M. Al-Emran and K. Shaalan, *Recent advances in technology acceptance models and theories*. Springer, 2021.
- [9] F. D. Davis, A. Granić, and N. Marangunić, "The technology acceptance model 30 years of TAM," *Technology (Singap World Sci)*, 2023.
- [10] M. Al-Emran and K. Shaalan, *Recent advances in technology acceptance models and theories*. Springer, 2021.
- [11] M. Oyman, D. Bal, and S. Ozer, "Extending the technology acceptance model to explain how perceived augmented reality affects consumers' perceptions," *Comput Human Behav*, vol. 128, p. 107127, 2022.
- [12] R. Alsharida, M. Hammood, and M. Al-Emran, "Mobile learning adoption: A systematic review of the technology acceptance model from 2017 to 2020," *International Journal of Emerging Technologies in Learning (IJET)*, vol. 16, no. 5, pp. 147–162, 2021.
- [13] E. Ammenwerth, "Technology acceptance models in health informatics: TAM and



- UTAUT,” *Stud Health Technol Inform*, vol. 263, pp. 64–71, 2019.
- [14] E. W. L. Cheng, “Choosing between the theory of planned behavior (TPB) and the technology acceptance model (TAM),” *Educational Technology Research and Development*, vol. 67, pp. 21–37, 2019.
- [15] M. T. Azhari, M. P. Al Fajri Bahri, M. S. Asrul, and T. Rafida, *Metode penelitian kuantitatif*. PT. Sonpedia Publishing Indonesia, 2023.
- [16] I. S. Windiarti, “Kajian Literatur Trend Penelitian Di Bidang Informatika Dan Komputer Untuk Dosen Dan Mahasiswa: Literature Study Of Research Trends In The Field Of Informatics And Computers For University Lecturers and Students,” *Jurnal Sains Komputer Dan Teknologi Informasi*, vol. 3, no. 2, pp. 114–118, 2021.
- [17] R. A. Permana and D. Ikasari, “Uji Normalitas Data Menggunakan Metode Empirical Distribution Function Dengan Memanfaatkan Matlab Dan Minitab 19,” in *Semnas Ristek (Seminar Nasional Riset dan Inovasi Teknologi)*, 2023.
- [18] H. Herdiansyah, “Statistika Parametrik Untuk Riset Korelasional Dan Kausal Komparatif.” President University, 2022.
- [19] S. PARLINDUNGAN, “PENERAPAN MODEL PERSAMAAN STRUKTURAL DENGAN METODE PENDUGAAN WEIGHTED LEAST SQUARE (WLS)(Studi Kasus: Kepuasan Mahasiswa Fakultas MIPA Universitas Lampung Terhadap Kualitas Virtual Class),” 2022.
- [20] A. Katebi, P. Homami, and M. Najmeddin, “Acceptance model of precast concrete components in building construction based on Technology Acceptance Model (TAM) and Technology, Organization, and Environment (TOE) framework,” *Journal of Building Engineering*, vol. 45, p. 103518, 2022.
- [21] M. N. Al-Nuaimi and M. Al-Emran, “Learning management systems and technology acceptance models: A systematic review,” *Educ Inf Technol (Dordr)*, vol. 26, no. 5, pp. 5499–5533, 2021.
- [22] A. Kemp, E. Palmer, and P. Strelan, “A taxonomy of factors affecting attitudes towards educational technologies for use with technology acceptance models,” *British Journal of Educational Technology*, vol. 50, no. 5, pp. 2394–2413, 2019.
- [23] S. A. Salloum, A. Q. M. Alhamad, M. Al-Emran, A. A. Monem, and K. Shaalan, “Exploring students’ acceptance of e-learning through the development of a comprehensive technology acceptance model,” *IEEE access*, vol. 7, pp. 128445–128462, 2019.
- [24] N. Nofitriyani, F. Wahid, and A. R. Pratama, “ONLINE LEARNING SYSTEM ACCEPTANCE BY INDONESIAN HIGH SCHOOL STUDENTS DURING THE COVID-19 PANDEMIC WITH UTAUT,” *Jurnal Teknik Informatika (Jutif)*, vol. 3, no. 6, pp. 1533–1538, 2022.
- [25] A. Bianca, “ANALISIS KINERJA APLIKASI PROMOSI WISATA MELALUI PERSPEKTIF WISATAWAN POTENSIAL: Studi Kasus pada Aplikasi SIHACI,” Universitas Pendidikan Indonesia, Kota Bandung, 2023.
- [26] P. Agung, “PENGGUNAAN QRIS PADA SEKTOR PENUNJANG PARIWISATA KAWASAN DESTINASI WISATA SUMATERA BARAT DENGAN PENDEKATAN METODE TECHNOLOGY ACCEPTANCE MODEL (TAM) (SURVEY PADA WISATAWAN SUMATERA BARAT),” Universitas Andalas, Kota Padang, 2023.