USE OF TAM FOR EVALUATION OF INTERNSHIP INFORMATION SYSTEM

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Abstract
This study aims to evaluate the internship information system at a Vocational High School. To achieve this goal, it is necessary to perform statistical analysis and calculations on the influence of the relationship between each variable in the Technology Acceptance Model (TAM) with the addition of one external variable, namely self-efficacy variable. The approach used in this research is quantitative. The source of the data used is primary data, derived from the users of the internship information system through a questionnaire containing eighteen questions with five alternative answers using a Likert scale as a point determination. Respondents targeted in this study amounted to 202 respondents, but one other thing was constrained, only 180 respondents filled out the questionnaire. refers to the analysis obtained using WarpPLS, data obtained that: (1) the convenience factor has an influence on the benefits, in using the information system, (2) the use benefit factor has a real influence on the intensity and use of the information system, (3) the attitude of use has influence on the intensity of the use of information systems, (4) the intensity has an effect on the use of information systems in real or implementation. (5) self-efficacy has an influence on the ease of use of information systems.

1. INTRODUCTION

Advances in science and information technology have changed the perspective and behaviour patterns of the Indonesian people in carrying out their activities. The emergence and role of information technology in the education system has brought about a new era of development in the world of education, but these developments have not been matched by an increase in human resources that determine the success of education in Indonesia in general. This is more because our human resources are still lagging behind to utilize information technology in the educational process [1].

The job internship information system is one of the implementations of technology in the field of education which is a strategic step in changing the concept of data processing in physical form into digital data, in the system involving parties such as internship organizers and apprentices. Business processes in the work internship system, which include data collection on apprentices, data on the industry or the agency where the internship is located, to the daily activities of apprentices can be processed and accessed through one system. The school is facilitated in the process of monitoring student activities through the system.

In the application of the work internship information system, there are still roles in the application that do not work properly, including the interns who do not complete the input process according to the form provided. This needs to be evaluated to determine the factors that influence the acceptance of the system.

The implementation of a technology is always related to the user's assessment of the technology

itself. The level of user understanding of the technology used has an important role to measure the level of success of its implementation. User acceptance or better known as user acceptance is an important indicator that affects the successful implementation of a technology. User Acceptance can be defined as the desire of a user group to utilize Information Technology (IT) designed to assist their work. Lack of User Acceptance will greatly affect the success of Information Technology implementation.

The Technology Acceptance Model or commonly referred to as the Technology Accepted Model (TAM) is used to predict user acceptance of the use of new technologies. The model known by Davis is the most widely used model in information systems research, because it produces good validity [2].

research on the internship information system that has been carried out at the Prambanan Muhammadiyah Vocational High School has been running optimally. The results showed that the application of internship information system applications was 73%. The effectiveness of internship information system applications falls into both categories. The details are 72% system quality, 74% information quality, 70% service quality, 71% user satisfaction and 70% profit. The application of the internship information system is feasible to be applied at SMK Muhammadiyah Prambanan, this is shown by the percentage of the effectiveness of the application of the internship information system application by 71% and the internship service by 72%[3].

II. LITERATURE
2.1. Internship Information System

The job internship information system is one of the implementations of technology in the field of education which is a strategic step in changing the concept of data processing in physical form into digital data, in the system involving parties such as internship organizers and apprentices. Business processes in the work internship system, which include data collection on apprentices, data on the industry or the agency where the internship is located, to the daily activities of apprentices can be processed and accessed through one system. The school is facilitated in the process of monitoring student activities through the system.

In the application of the work internship information system, there are still roles in the application that do not work properly, including the interns who do not complete the input process according to the form provided. This needs to be evaluated to determine the factors that influence the acceptance of the system.

2.2. Technology Acceptance Model

There are two main principles related to user acceptance, namely perceived ease of use and perceived usefulness. Perceived ease of use is defined as a measure of a person's belief that the use of information technology will be easy and does not require high user competence. Perceived usefulness is defined as a person's level of belief that implementing a technology can improve the performance and effectiveness of their work [2][18]. TAM is an adoption of the concept developed by Fishbein, namely Theory of Reasoned Action (TRA) which is an action concept based on the idea that a person's reaction and perception of something can determine the user's attitude and behaviour [2][4].

2.3. Perceived Usefulness

That this perceived benefit can be interpreted as a user's belief that using a certain system will improve his work performance [5]. From this theory, it can be interpreted that by maximizing the use of technology, it can increase the effectiveness of the work of its users. The perception of benefits is the most significant construct in influencing attitudes, behavioural intentions and behaviour in the application of a technology compared to other constructs. So, the perception of this benefit becomes one of the main parts because it has an influence on many constructs [6].

2.4. Perceived Ease of Use

Perception of ease of use can be interpreted as a measuring tool for users that using certain information systems will make work easier [5], save time and effort.

2.5. Attitude Toward Using

Attitude can be defined as a feeling in using a person's system if they have to perform the behaviour to be determined [7]. From this theory, it can be concluded that attitude is an important factor because it will have an impact on the behaviour of using a system.

Explains that this attitude of use is the most influential factor on intention to use. Perceived compatibility also has direct and indirect effects on the e-marketing system [8].

2.6. Behavioural Intention to Use

The intention to use a technology will have an impact on the use of technology in a real scope, and is also influenced by attitudes and uses [7]. The higher the intensity of its use, the more it will increase its use, and increase the value of the benefits. Intention of use has a high correlation with perceived ease of use, and is also positively influenced by attitude of use on university academic web portals[9].

2.7. Actual Technology Use

Actual Technology Use, hereinafter referred to as actual technology use or use. The use of technology is significantly influenced by the convenience factor and the attitude factor of use. The easier a technology to use, the more real use it will be [10].

2.8. Self-Efficacy

That self-efficacy is a person's assessment of his ability to organize and decide the necessary actions with the aim of achieving the desired performance. The main source of self-efficacy is perception and interpretation, both physically and emotionally. Self-efficacy plays a role in influencing the motivational process through a number of individual efforts and how long individuals work when there are obstacles [11][12].

III. RESEARCH METHODS
3.1. Data Collecting

This type of research is evaluation research. The evaluation is carried out by utilizing the Internship Information System as the object of research, then concludes the results of the acceptance of the use of the Internship Information System based on the data obtained from the user.

The data collection method used in this study was through a questionnaire that could be filled out by respondents online. Respondents who can access the questionnaire in this study are limited to class XI students who have carried out the work internship process. So, it can be ascertained that the respondent is an active user of the internship information system.

Questionnaires as data collection techniques are carried out by giving a set of questions or written questions to respondents to answer [13].

3.2. Analysis Technique

The data analysis method used in this study uses quantitative analysis methods on the results of data collection related to the use of work internship information systems.

Data calculations carried out in this study using WarpPLS software. Structural Equation Modeling (SEM) analysis with warpPLS software was used to measure the achievement of the hypothesis. This statistical analysis software is more commonly used because of several advantages it has:. First, SEM-PLS is appropriate for this research method, because it uses variables that cannot be measured directly (latent variables) and has taken into account measurement errors. Second, SEM analysis can simultaneously measure multiple dependencies as in this research method[14].

3.3. Validity

Validity is a reference that will be used to show the feasibility of an instrument to be used in research. Valid or not an instrument needs to be tested to know the level of validity. The validity test in this study was carried out using WarPLS version 7.0 by looking at the convergent validity value.

3.4. Reliability Test

The reliability test is the stage that is carried out after the validity test, the reliability test is used to measure the level of consistency of the measuring instrument used for the same results on different occasions. To test the reliability of the measuring instrument, this study used the Cronbach Alpha method. The questionnaire can be said to be reliable if the resulting Cronbach Alpha value is more than 0.60.

3.5. Hypothesis

Hypothesis testing in this study uses a t-test (t-test), paired sample test is a test model used to measure the effectiveness of an action, which is marked by the difference between the average before and the average after the action is given. This test was conducted to determine the effect of each independent variable on the predetermined variables. The hypothesis is accepted if the value of t-table > t-count, then there is no significant effect of the independent variables on the variables that have been determined. The hypothesis is accepted if the value of t-table < t-count, then there is a significant effect of the independent variables on the variables that have been determined. [15]

Hypothesis in this research is (1) the positive effect of Perceived Ease of Use on Perceived Usefulness, (2) the positive effect of Perceived Ease of Use on Attitude Toward Using. (3) the positive effect of Perceived Usefulness on Attitude Toward Using. (4) the positive effect of   Perceived Usefulness on Behaviour Intention Use. (5) the positive effect of Perceived Usefulness on Actual Technology Use. (6) the positive effect Attitude Toward Using on Behaviour Intention to Use. (7) the positive effect of Behaviour Intention Use on Actual System Use. (8) the positive effect of Self-Efficacy on Perceived Ease of Use. (9) the positive effect of Self-Efficacy on Perceived Usefulness.
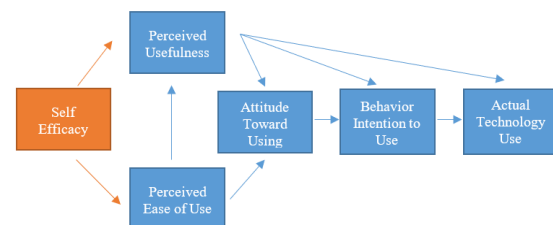

Figure 1. Hypothesis Research Layout

IV. RESULTS
4.1. Overview Respondents

The data obtained in this study were sourced from questionnaires that were only given to the

targeted population, namely students at one of the Vocational High Schools using an on-line form with details of questionnaire collection as follows:

Table 1. Overview Respondents

	Total	Collected	Not Collected
Count	202	180	22
Percent	100%	89,1%	10,9%

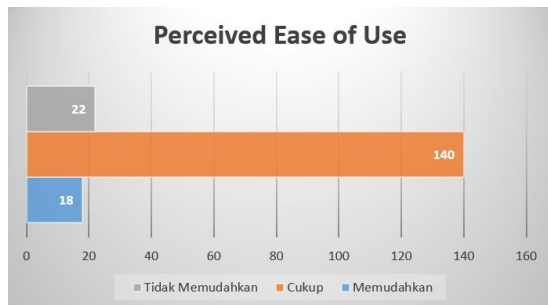### 4.1.1. Perceived Ease of Use

Figure 2. Perceived Ease of Use Data

Based on the processed data, the average value was 11.91, the median value was 12.00 and the standard deviation was 2.352. Of the 4 questions on this variable, they are classified into 3 criteria, namely easy, sufficient and not easy. A total of 18 users were facilitated by information system, as many as 140 users were facilitated with information system, as many as 22 users were not facilitated by information system.
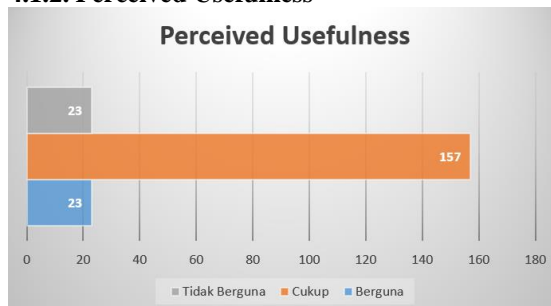
4.1.2. Perceived Usefulness

Figure 3. Perceived Usefulness Data

Based on the processed data, the average value is 12.1, the median value is 12.00 and the standard deviation is 2.177. Of the 4 questions on this variable, they are classified into 3 criteria, namely useful, sufficient and useless. As many as 23 users feel information system is useful, as many as 157 users feel enough with information system, as many as 23 users feel information system is useless.
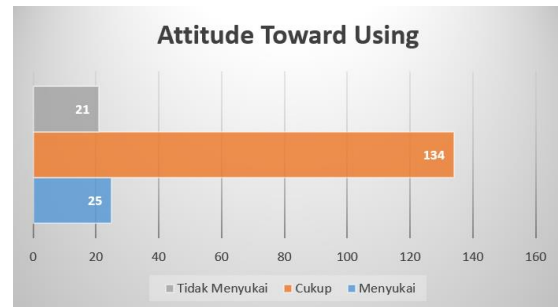
4.1.3. Attitude Toward Using

Figure 4. Attitude Toward Using Data

Based on the processed data, the average value is 5.89, the median value is 6.00 and the standard deviation is 1.352. of the 2 questions on this variable, were classified into 3 criteria, namely liking, moderate and disliking. As many as 25 like information system, as many as 134 users are satisfied with using information system, as many as 21 users do not like information system.
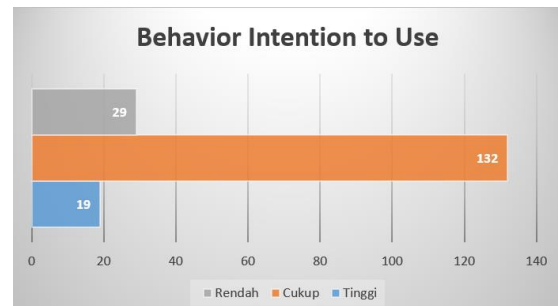
4.1.4. Behaviour Intention to Use

Figure 5. Behaviour Intention to Use Data

Based on the processed data, the average value is 5.89, the median value is 6.00 and the standard deviation is 1,352. of the 2 questions on this variable, are classified into 3 criteria, namely high, sufficient and low. A total of 19 users are included in the high criteria for using information system, as many as 132 users are included in the sufficient criteria for using information system, as many as 29 users are included in the low criteria for using information system.

4.1.4. Actual to Use

Figure 6. Actual to Use Data

Based on the processed data, the average value is 11.83, the median value is 12.00 and the standard

deviation is 2.279. of the 4 questions on this variable, it is classified into 3 criteria, namely always using, rarely using and not using. A total of 21 users always uses information system, as many as 132 users often use information system, as many as 27 users rarely use information system.
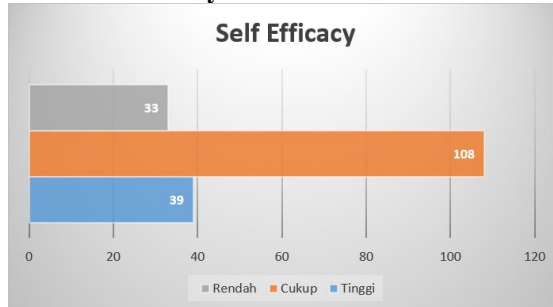
4.1.5. Self-Efficacy

Figure 7. Self-Efficacy Data

Based on the processed data, the average value is 6.14, the median value is 6.00 and the standard deviation is 1.731. of the 2 questions on this variable, are classified into 3 criteria, namely high, sufficient and low. A total of 39 users are included in the high criteria for using information system, as many as 108 users are included in the sufficient criteria for using information system, as many as 33 users are included in the low criteria for using information system.

4.2. Validity and Reliability Test
4.2.1. Validity Test

Based on the results of data processing using WarpPLS version 7 software, there are two criteria to assess whether the outer model meets the requirements of convergent validity for reflective variables, namely loading must be above 0.70 and significant p value <0.05[16] . The following is the data from the validity test results for each instrument:

Table 2. Validity Test

PEoU	PU	ATU	BIU	ATU	SEF
		Average variances extracted			
0.73	0.72	0.77	0.79	0.74	0.78

4.2.2. Reliability Test

Reliability shows the benchmark of the instrument being measured. Reliability can be measured by the criteria of composite reliability and Cronbach's alpha. A construct is declared reliable if the composite reliability value is > 0.70 and the Cronbach's alpha value is > 0.60. The following are the results of reliable tests on the variables used:

Table 3. Reliability Test

Variable	Cronbach Alpha	Composite Reliability
PEoU	0.706	0.820
PU	0.797	0.815
ATU	0.712	0.874
BIU	0.735	0.883
AoU	0.722	0.828
SEF	0.721	0.878

From the results of the calculation of the data in the table above, all the variables used in this study have met the minimum values in the Cronbach Alpha and Composite Reliability tests. So it can be interpreted that all variables in this study are reliable and can be used as research instruments.

Table 4. Latent Variable Coefficients

	peu	pu	atu	biu	atu	sef
R-squared	0.03	0.11	0.02	0.05	0.00	
Composite Reliab	0.82	0.81	0.87	0.88	0.82	0.87
Cornbach's alpha	0.70	0.79	0.71	0.73	0.72	0.72
Avg.var.extrac	0.73	0.72	0.77	0.79	0.74	0.78
Full Collin.Vif	1.21	1.09	1.04	1.07	1.13	1.06
Q-squared	0.03	0.11	0.02	0.05	0.09	

Table 5. Model Fit Criteria

Average Path Coefficient (APC)	0.166	$P < 0.001$
Average R-Squared (ARS)	0.620	$P < 0.001$
Average Variance Inflation Factor (AVIF)	1.028	Good if < 5

After the fit model can be accepted with good, so that it can be continued to the next stage for the evaluation process of each hypothesis[17].

4.3. Hypothesis

This test was conducted to determine the relationship between variables and to prove the truth of the hypothesis. The results of the analysis are seen from the results of the relationship between variables measured by looking at the path coefficients and the level of significance. The significance level used is 5%.
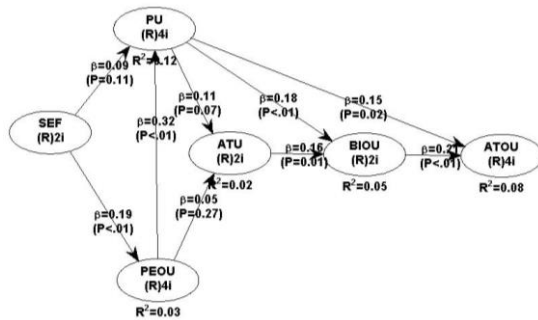
Figure 8. Hypothesis

4.3.1. The Effect of Perceived Ease of Use on Perceived Usefulness

In the first hypothesis, it is suspected that there is an influence of Perceived Ease of Use on Perceived Usefulness. Based on the above analysis, Perceived Ease of Use has an influence on Perceived Usefulness. Evidenced by the p value < 0.0, then this hypothesis is accepted.

4.3.2. The Effect of Perceived Ease of Use on Attitude Toward Using

In the second hypothesis, it is suspected that there is an influence of Perceived Ease of Use on Attitude Toward Using. Based on the above analysis, Perceived Ease of Use has no effect on Attitude Toward Using. Evidenced by the value of $p = 0.27$ or above 5%, then this hypothesis is rejected.

4.3.3. The Effect of Perceived Usefulness on Attitude Toward Using

In the third hypothesis, it is suspected that there is an influence of Perceived Usefulness on Attitude Toward Using. Based on the above analysis, Perceived Usefulness has no effect on Attitude Toward Using. Evidenced by the value of $p = 0.07$ or above 5%, then this hypothesis is rejected.

4.3.4. The Effect of Perceived Usefulness on Behaviour Intention to Use

In the fourth hypothesis, it is suspected that there is an influence of Perceived Usefulness on Behaviour Intention to Use. Based on the above analysis, Perceived Usefulness has an influence on Behaviour Intention to Use. It is proven by the p value < 0.01 or below 5%, then this hypothesis is accepted.

4.3.5. The Effect of Perceived Usefulness on Actual Technology Use

In the fifth hypothesis, it is suspected that there is an influence of Perceived Usefulness on Actual Technology Use. Based on the above analysis, Perceived Usefulness has an influence on Actual Technology Use. Evidenced by the value of $p = 0.02$ or below 5%, then this hypothesis is accepted.

4.3.6. The Effect of Attitude Toward Using on Behaviour Intention to Use

In the sixth hypothesis, it is suspected that there is an influence of Attitude Toward Using on Behaviour Intention to Use. Based on the above analysis, Attitude Toward Using has an influence on Behaviour Intention to Use. Evidenced by the value of $p = 0.01$ or below 5%, then this hypothesis is accepted.

4.3.7. Behaviour Intention to Use on Actual to Use

In the seventh hypothesis, it is suspected that there is an influence of Behaviour Intention to Use on Actual to Use. based on the analysis above, Behaviour Intention to Use has an influence on Actual to Use. evidenced by a value < 0.01 or below 5%, then this hypothesis is accepted.

4.3.8. The Effect of Self-Efficacy on Perceived Ease of Use

In the eighth hypothesis, it is suspected that there is an influence of Self Efficacy on Perceived Ease of Use. based on the results of the analysis of Self Efficacy has an influence on the Perceived Ease of Use. evidenced by the p value <0.01 or below 5%, then this hypothesis is accepted.

4.3.9. The Effect of Self-Efficacy on Perceived Usefulness

In the ninth hypothesis, it is suspected that there is an influence of Self Efficacy on Perceived Usefulness. based on the results of the analysis of Self Efficacy has no effect on Perceived Usefulness. evidenced by the value of $p = 0.11$ or above 5%, then this hypothesis is rejected.

V. CONCLUSION

This study aims to evaluate the work internship information system in terms of technology acceptance using the Technology Acceptance Model (TAM) at Vocational High School. Based on the results of the analysis described in the previous chapter, the following conclusions are obtained Perceived Ease of Use has a positive influence on Perceived Usefulness. Perceived Usefulness has a positive influence on Behaviour Intention to Use. Perceived Usefulness has a positive influence on Actual Technology Use. Attitude Toward Using has a positive influence on Behaviour Intention Use. Behaviour Intention Use has a positive influence on Actual Technology Use. Self-Efficacy has a positive influence on Perceived Ease of Use

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