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EVALUATING THE SUCCESS OF *GOOGLE CLASSROOM* IMPLEMENTATION IN EQUALITY EDUCATION IN PKBM USING THE *TECHNOLOGY ACCEPTANCE MODEL APPROACH*

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Abstract
This study aims to evaluate the success of Google Classroom implementation in non-formal education (PKBM) using the Technology Acceptance Model (TAM) approach. A quantitative survey method was employed with 76 PKBM students as respondents. The variables examined include Perceived Ease of Use (PEOU), Perceived Usefulness (PU), Behavioral Intention (BI), and Actual System Use (ASU). Data were collected using a Likert-scale questionnaire and analyzed through SEM-PLS. The results indicate that PEOU significantly influences PU ($\beta = 0.68$; $p < 0.001$), while both PEOU and PU significantly affect BI ($\beta = 0.41$ and $\beta = 0.52$; $p < 0.001$). Furthermore, BI has the strongest influence on ASU ($\beta = 0.73$; $p < 0.001$). The coefficient of determination reveals that the model explains 64% of the variance in BI and 53% in ASU. These findings suggest that perceived ease of use and perceived usefulness are key determinants in enhancing users' behavioral intention, which subsequently drives successful system implementation. This study contributes to the extension of TAM in non-formal education contexts and provides practical insights for technology-based learning implementation in PKBM.

I. INTRODUCTION

Digital transformation in the education sector has accelerated significantly, especially since the global pandemic that prompted the massive adoption of online learning platforms. One of the widely used platforms is Google Classroom, which offers flexibility in distributing materials, interactions, and learning evaluations. In the context of non-formal education such as the Community Learning Activity Center (PKBM), the use of this technology is an interesting new phenomenon, considering the heterogeneous characteristics of students both in terms of age, educational background, and digital literacy. However, the implementation of this technology does not always run optimally due to differences in the level of technology acceptance by users. The urgency of this research is increasing in line with the demand to improve the quality of equality education services on par with formal education. PKBM as an alternative educational institution is required to be able to integrate technology in the learning process to increase effectiveness and efficiency. However, not all students are able to accept and utilize learning technology optimally. Therefore, it is important to evaluate the factors that affect the adoption of technology, especially in the use of Google Classroom, so that the implementation carried out really has a positive impact on the learning process.

A number of previous studies have shown that the Technology Acceptance Model (TAM) approach is effectively used to analyze technology acceptance in various educational contexts. Davis (1989) stated that the perception of Perceived Ease of Use (PEOU) and the perception of usefulness (PU) are the main determinants in influencing attitudes and intentions of using technology [1]. Other research shows that the use of web-based Learning Management Systems

improves the effectiveness of student learning and interaction [2], [3]. In addition, recent studies indicate that external factors such as technological experience and institutional support also play a role in increasing system acceptance [4], [5]. However, most of the research focuses on formal education such as schools and colleges.

However, there is a significant research gap, especially in the context of equality education in PKBM. The characteristics of PKBM students that are different from formal students, such as limited access to technology, varied learning motivation, and uneven levels of digital literacy, have not been widely studied in the perspective of TAM. Additionally, previous research has tended to only measure intent to use without evaluating the success of the implementation thoroughly. Therefore, research is needed that specifically examines the relationship between TAM variables in the context of PKBM and measures the success of Google Classroom implementation empirically. Based on this description, the formulation of the problem in this study is: (1) how does Perceived Ease of Use affect Perceived Usefulness in the use of Google Classroom in PKBM; (2) how PU and PEOU affect Behavioral Intention; and (3) how does Behavioral Intention affect the success of system implementation. The purpose of this study is to analyze and evaluate the acceptance rate and the success of the implementation of Google Classroom using the TAM approach to equality education at PKBM Harapan Bangsa 1 Bandar Lampung. The results of this study are expected to make a theoretical contribution to the development of the TAM model in non-formal education and become a practical recommendation for PKBM managers in improving the quality of technology-based learning.

II. RESEARCH METHODS

2.1. Data Collection Techniques

This study uses a quantitative approach with a survey method to analyze the acceptance rate and success of the implementation of Google Classroom in equality education in PKBM. This approach was chosen because it is able to objectively test the causal relationship between variables through statistical analysis. The model used in this study *is the Technology Acceptance Model* (TAM), which emphasizes the relationship between perceived *ease of use*, perceived *usefulness*, behavioral intention, and system implementation success (*Actual System Use*). This study is designed to examine the relationship between these variables in the context of non-formal education.

The data collection technique was carried out through questionnaires as the main instrument, which was compiled using a Likert scale of 1–5 to measure respondents' perception of each variable in the TAM model. In addition, the observation method is used to directly observe Google Classroom usage activities in the learning process, such as student interaction, assignment collection, and engagement in online classes. Documentation is also carried out to obtain supporting data in the form of system usage history, such as the frequency of access and student learning activities, so that the research results are more comprehensive and valid.

The population in this study is all students of PKBM Harapan Bangsa 1 Bandar Lampung who use *Google Classroom* as a learning medium. The sampling technique used was total sampling, with a sample of 76 students, so that the entire population was used as research respondents. This is done to obtain a comprehensive picture of the level of technology acceptance in the PKBM environment. The diverse characteristics of respondents in terms of age, educational background, and technological experience are important considerations in the analysis of research results.

The data analysis technique is carried out through several stages, namely validity and reliability tests to ensure that the research instrument is suitable for use, followed by a classical assumption test as a prerequisite for statistical analysis. Furthermore, hypothesis testing was carried out using multiple linear regression analysis or SEM-PLS, to determine the influence between variables in the TAM model. The t-test is used to test for partial influences, while path analysis is used to look at the direct and indirect relationships between variables. The results of this analysis are expected to provide an empirical picture of the factors that affect the success of the implementation of *Google Classroom* in PKBM Harapan Bangsa 1 Bandar Lampung.

2.2. Research Framework

This research framework refers to the *Technology Acceptance Model (TAM)* which explains that *Perceived Ease of Use (PEOU)* has a significant influence on *Perceived Usefulness (PU)*. In the context of using Google Classroom in PKBM, the easier the system is to use, the more likely users are to feel the benefits in supporting the learning process. Classic research by Fred D. Davis [1] shows that ease of use directly increases the perception of the usefulness of technology. This is reinforced by recent research in the field of e-learning which states that a simple and easy-to-understand interface can increase the effectiveness of using online learning systems [2]. Thus, in this study, it is assumed that the ease of use of Google Classroom is the initial factor that determines the perception of benefits felt by PKBM students.

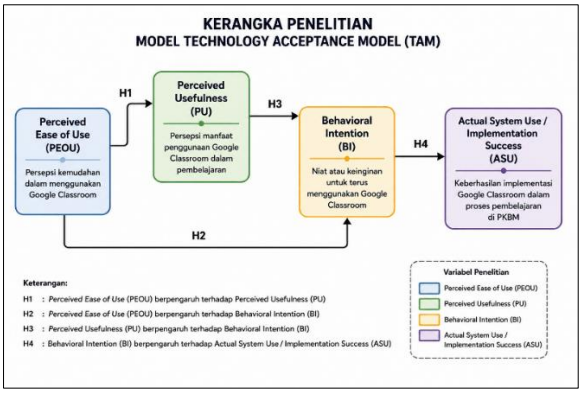

Figure 1. Research Framework

The PEOU and PU variables have an effect on *Behavioral Intention* (BI) or intention to use. This means that when students feel that *Google Classroom* is easy to use and provides real benefits in learning, then they will have a tendency to continue using it. Research by Venkatesh and Davis [3] developed the TAM by confirming that PU has a dominant influence on use intent compared to PEOU. In addition, research on online learning systems shows that the combination of ease of access and learning benefits can increase user motivation and commitment in utilizing technology sustainably [4]. In the context of PKBM, this is important because the success of learning is greatly influenced by the internal motivations of diverse students.

Behavioral Intention (BI) affects Actual System Use (ASU) or the success of system implementation. A strong intention to use technology will be reflected in real, consistent and sustainable use. Empirical research shows that BI is the main predictor in determining the level of technology adoption in various sectors, including education [5]. In the implementation of Google Classroom at PKBM Harapan Bangsa 1 Bandar Lampung, the success of the system is not only measured by the availability of technology, but also by the intensity of use, student involvement, and its impact on learning effectiveness. Therefore, BI's relationship with ASU is an important indicator in evaluating the success of the implementation of digital-based learning technology in the non-formal education environment.

III. RESULTS AND DISCUSSION

3.1. Research Results

Based on the results of data processing on 76 students of PKBM Harapan Bangsa 1 Bandar Lampung, a validity and reliability test was carried out on all variable indicators in the Technology Acceptance Model (TAM) model. The results of the validity test show that all statement items have a Corrected Item-Total Correlation value of > 0.30, so they are declared valid. The reliability test using Cronbach's Alpha showed the following values: PEOU = 0.87, PU = 0.89, BI = 0.85, and ASU = 0.88, all of which were above the minimum limit of 0.70. This indicates that the research instrument has an excellent level of consistency and is suitable for further analysis.

Table 1. Validity and Reliability Test Results

Variable	Number of Items	Corrected Item-Total Correlation	Cronbach's Alpha	Remarks
PEOU (Perceived Ease of Use)	4	0,52 – 0,78	0,87	Valid & Reliable
PU (Perceived Usefulness)	4	0,55 – 0,81	0,89	Valid & Reliable
BI (Behavioral Intention)	3	0,50 – 0,76	0,85	Valid & Reliable
ASU (Actual System Use)	3	0,53 – 0,79	0,88	Valid & Reliable

The analysis of the relationship between variables was carried out using linear regression and path analysis. The test results showed that *Perceived Ease of Use (PEOU)* had a significant effect on *Perceived Usefulness (PU)* with a coefficient value of $\beta = 0.68$, a value of $t = 7.45$, and a significance of $p < 0.001$. In addition, PEOU also has a direct effect on *Behavioral Intention (BI)* with values of $\beta = 0.41$, $t = 4.32$, and $p < 0.001$. The PU variable showed a stronger influence on BI with values of $\beta = 0.52$, $t = 5.87$, and $p < 0.001$. The value of the determination coefficient (R^2) for the BI variable is 0.64, which means that 64% of the variation in intent of use can be explained by PEOU and PU simultaneously.

Table 2. Coefficient of Determination (R^2)

Dependent Variable	R^2	Interpretasi
PU	0,46	46% are influenced by PEOU
BI	0,64	64% are influenced by PEOU and PU
ASU	0,53	53% are influenced by BI

The effect of Behavioral Intention (BI) on Actual System Use/Implementation Success *(ASU)* showed very significant results with values of $\beta = 0.73$, $t = 8.12$, and $p < 0.001$. The R^2 value for the ASU variable is 0.53, which indicates that 53% of the success of Google Classroom implementations can be explained by the intention of the student to use it. Overall, all hypotheses in the TAM model (H1, H2, H3, and H4) are accepted. These findings show that ease of use and perceived benefits play an important role in increasing use intention, which ultimately has a significant impact on the successful implementation of technology-based learning systems in PKBM. For more details on the relationship between variables and hypothesis testing, you can see the following figure:

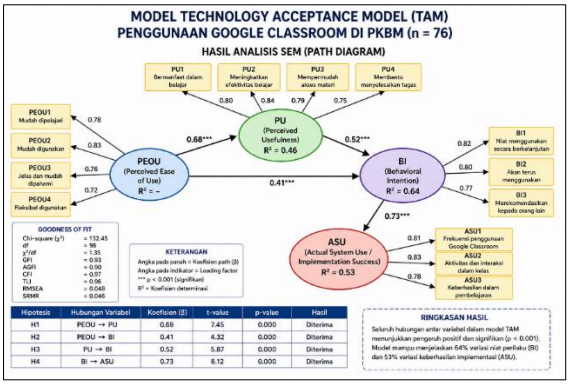

Figure 2. Hypothesis Test Results

3.2. Discussion

The study showed that *Perceived Ease of Use (PEOU)* had a significant effect on *Perceived Usefulness (PU)* with a coefficient of $\beta = 0.68$ ($p < 0.001$). These findings indicate that the easier Google Classroom is to be used by PKBM students, the higher the perception of benefits felt in supporting the learning process. In the context of equality education, ease of access, simple appearance, and flexibility of use are important factors considering the heterogeneity of students' digital abilities. These results are in line with the research of Fred D. Davis [1] who affirms that ease of use is a major determinant in shaping the perception of system usability. Follow-up studies by Venkatesh and Bala [2] also found that PEOU significantly improves PU in various information system implementations. In addition, research in the context of e-learning by Park [3] shows that the convenience of online learning systems significantly increases the perception of learning effectiveness.

The results showed that PEOU and PU had a significant effect on Behavioral Intention (BI), with coefficients of $\beta = 0.41$ and $\beta = 0.52$ respectively ($p < 0.001$). This shows that although ease of use is important, the perceived benefits have a more dominant influence in shaping the intention of use. In the context of PKBM, students tend to continue to use the system if they feel a real impact on improving material understanding and learning efficiency. These findings are consistent with research by Venkatesh and Davis [4] who stated that PU is the strongest predictor of technology use intention. Another study by Alharbi and Drew [5] in the context of e-learning also shows that the benefits of the system have a greater influence than the ease of use in determining the adoption of technology. In addition, a study by Tarhini et al. [6] reinforces that the combination of convenience and benefit contributes significantly to increased motivation to use digital learning systems**.** *Behavioral Intention (BI)* was shown to have the strongest influence on *Actual System Use (ASU)* with a coefficient of $\beta = 0.73$ ($p < 0.001$). This suggests that high usage intent will drive real and sustainable use of the system, which ultimately determines the success of implementation. In the implementation of Google Classroom in PKBM, success is not only seen from the use of technicalities, but also from student involvement, consistency of access, and improvement of learning quality. These findings are supported by empirical research by Turner et al. [7] which states that behavioral intent is a key indicator in predicting the actual use of the system. Another study by Šumak et al. [8] also showed that BI has a significant direct influence on the use of e-learning. In addition, recent research by Al-Rahmi et al. [9] and Salloum et al. [10] confirms that the successful implementation of digital learning systems is highly dependent on the level of intent and engagement of users.

The results of this study strengthen the validity of the Technology Acceptance Model (TAM) model in explaining technology acceptance in the context of non-formal education such as PKBM. The high value of the determination coefficient (R^2 BI = 0.64 and R^2 ASU = 0.53) indicates that this model has a good ability to explain dependent variables. However, there are still other factors outside the model that can affect the success of implementation, such as infrastructure support, digital literacy, and social factors. These findings are in line with the research of Abdullah and Ward [11] who stated that the integration of external variables can increase the predictive power of the TAM model. Therefore, further research is recommended to develop a model by adding external variables to obtain more comprehensive results.

IV. CONCLUSION

This study successfully proves that the *Technology Acceptance Model (TAM) model* is effectively used to evaluate the success of the implementation *of Google Classroom* in equality education in PKBM. The results of the analysis showed that *Perceived Ease of Use (PEOU)* had a significant effect on *Perceived Usefulness (PU),* which indicates that the ease of use of the system is an initial factor in shaping the perception of user benefits. In addition, PEOU and PU simultaneously have a significant effect on Behavioral Intention (BI), with PU having a more dominant influence. This shows that PKBM students tend to use technology if they feel real benefits in increasing learning effectiveness. Furthermore, Behavioral Intention (BI) has been proven to have the strongest influence on *Actual System Use (ASU)* or the success of system implementation. With a high and significant coefficient value, it can be concluded that the intention of use is a key factor in determining the success of the adoption of learning technology. Overall, the research model was able to explain most of the variation in user behavior, thus showing that the implementation of Google Classroom in PKBM has gone well, but there is still room for further development.

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