

## Measuring User Acceptance Of The Accurate-5 Application Using The Technology Acceptance Model (TAM) And Smartpls Software (Case Study Of Students Of State Senior High School 1 Lembang Bandung)

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### Abstract

*This study employed the Technology Adoption Model (TAM) to evaluate students' utilization of the Accurate-5 accounting software at SMA Negeri 1 Lembang, Bandung. The study aims to evaluate user satisfaction levels and determine the influencing factors. The study utilizes Perceived Usefulness (PU) and Perceived Ease of Use (PE) as independent variables, Behavioral Intention to Use (BIU) as a mediating variable, and Actual System Use (AU) as the dependent variable. The researcher employed SmartPLS version 4 to analyze and assess the data. The results demonstrate enhanced reliability and validity, as evidenced by high Cronbach's alphas and composite validity scores, with an Average Variance Extracted (AVE) exceeding 0.5. Hypothesis testing using P-values demonstrates that Perceived Ease of Use significantly influences Behavioral Intention to Use ( $P < 0.05$ ). Conversely, Perceived Usefulness exerts no significant influence on Behavioral Intention to Use ( $P > 0.05$ ). Furthermore, Behavioral Intention to Use significantly influences Actual System Use ( $P < 0.05$ ). Based on T-statistics and P-values, Perceived Usefulness directly affects Actual System Use ( $T > 1.96$ ,  $P < 0.05$ ), whereas Perceived Ease of Use does not exert a direct influence ( $T < 1.96$ ,  $P > 0.05$ ).*

**Keywords :** Accurate, Applications, Information Systems, TAM, SPSS

### INTRODUCTION

The use of this application requires a robust, efficient framework to support its various functions. Dependable, high-caliber information is crucial for efficient decision-making. The degree of preparedness for utilization is crucial when businesses build and execute systems or applications for all stakeholders. Accounting software optimizes bookkeeping and represents a significant investment for future growth. Amijaya, 2025. The Accurate-5 accounting application is essential for the Accounting and Finance departments in generating financial reports and is a viable alternative.

Performing a readiness analysis is crucial to ascertain the continued effectiveness, efficiency, and advantages of implementation for both the

organization and its users. This examination covers applications, information, infrastructure, human resources, and organizational elements. The readiness level can be evaluated and quantified by numerous established approaches, including the Technology Acceptance Model (TAM), Task Technology Fit (TTF), End User Computing Satisfaction (EUCS), Human Organization Technology Fit (HOT FIT), and the DeLone and McLean models. This research uses Structural Equation Modeling (SEM) to derive findings from the Technology Acceptance Model (TAM).

Measurement is the process of obtaining data through empirical observation to gain information relevant to defined objectives (Alfadda & Mahdi, 2021). Measurement serves

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as a tool for assessing and evaluating advancement toward strategic objectives. Furthermore, a measurement must include numerous essential aspects, including viewpoints, the organizational context, and the characteristics of the information system. It encompasses specific criteria for evaluating performance measures, research approaches, and analytical levels—be it individual, corporate, or societal (Na et al., 2022; Schorr, 2023).

Accurate-5 is a specialized accounting software developed by PT. Cipta Piranti Sejahtera (CPSOFT). The company launched its fifth edition in late 2015, aiming to cater to various types of Small and Medium Enterprises (SMEs). The Accurate-5 accounting application offers notable advantages, including remarkable accuracy, a user-friendly design, multi-currency support, and multilingual support in English and Indonesian. These attributes successfully enhance user engagement and promote system adoption. Noh et al. (2021). This program offers a comprehensive set of features and benefits that enhance company operations, enabling organizations to manage their financial activities more effectively.

The Technology Adoption Model (TAM) is a crucial framework for elucidating and forecasting individual adoption and use of information technology systems (Han & Sa, 2022). Fred D. Davis refined this model by extending the Theory of Reasoned Action (TRA), initially introduced by Icek Ajzen and Martin Fishbein in 1980 (Cheah et al., 2023). Davis posits that two fundamental variables—perceived usefulness and perceived ease of use—

account for and forecast customer acceptance of technology through the Technology Acceptance Model (TAM). These two essential factors influence an individual's attitude toward technology utilization, which subsequently shapes their purpose to engage with it. This behavioral objective ultimately determines the system's practical application (Mastour et al., 2025; Zin et al., 2023).

Smart Partial Least Square (SmartPLS), created in Germany in 2015, is an advanced software tool for statistical data analysis and complex model evaluation. SmartPLS development aims to provide a more intuitive interface and greater versatility than other analytical methods. SmartPLS offers numerous advantages, including the ability to handle small sample sizes, non-normally distributed data, and complex model configurations. Ultimately, SmartPLS helps researchers turn concepts into concrete outcomes, enabling informed decision-making.

Structural Equation Modeling (SEM) represents a comprehensive statistical integration of factor analysis, regression, and path analysis. This modeling technique enables researchers to conduct comprehensive assessments of the direct, indirect, and total effects between exogenous and endogenous variables. Al-Adwan et al. (2023)

Moreover, Structural Equation Modeling serves as a robust statistical analysis instrument enabling researchers to investigate the links between observable variables (manifest variables) and their underlying latent variables (constructs). It also enables the examination of

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intricate interdependencies among the latent variables.

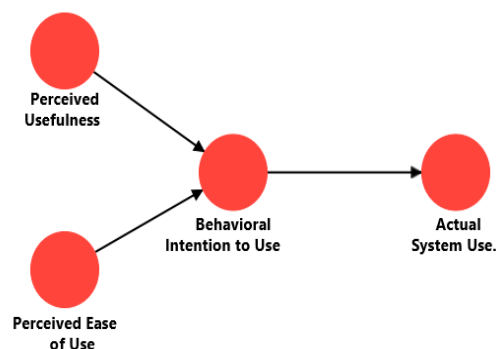
This study seeks to evaluate students' acceptance of the Accurate-5 accounting software using the Technology Acceptance Model (TAM). This study examines the relationships among Perceived Usefulness (PU), Perceived Ease of Use (PE), and Behavioral Intention to Use (BIU), which then affects Actual System Use (AU). This research seeks to identify the key factors affecting user acceptance by analyzing the significant impacts of perceived usefulness (PU) and perceived ease of use (PE)

on behavioral intention to use (BIU) and actual usage (AU), either directly or through usage intention. This study seeks to clarify the determinants affecting the acceptability of Accurate-5 among students at SMA Negeri 1 Lembang, Bandung.

## METHOD

### Framework

The conceptual framework provides the essential foundation for research execution.



**Figure 1. Framework of Thought**

This study utilized elements derived from the Technology Acceptance Model (TAM) (Davis, 1989):

Perceived ease of use denotes the extent to which an individual perceives a particular system as simple and understandable. The researcher evaluates this viewpoint by examining indicators of the system's learnability and the simplicity of its control to achieve specific aims.

The user's disposition towards use reflects their evaluative opinion of the system's application. The assessment includes metrics on the user's perspective, emotional response, and behavioral tendencies.

The behavioral intention to use reflects the user's inclination to persist in utilizing a specific system. The study evaluates this objective through metrics of the inclination to integrate supplementary peripherals, the drive to maintain system utilization, and the tendency to advocate usage among other users.

The actual use of a system denotes its practical application in real-world contexts. The research measures actual consumption through indicators of intensity and frequency.

The research categorizes these variables as follows:

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- a. Exogenous Variables: These represent the independent variables, namely Perceived Usefulness and Perceived Ease of Use.
- b. Endogenous Variables: These refer to the dependent variables in this study, namely Behavioral Intention to Use and Actual System Use.

This study employs a questionnaire for data collection and analyzes the results using SmartPLS. Questionnaires serve as an effective method for data collection when the researcher clearly delineates the measurement variables and predicts participants' responses. The study employed a 5-point Likert scale for closed-ended questions. Participants respond to two inquiries to evaluate their impressions and anticipations regarding the quality of the Accurate-5 application.

The researcher assigns values to the Likert scale as follows:

- Strongly Disagree: 1
- Opposition: 2
- Neutral: 3
- Affirmative: 4
- Strongly Agree: 5

This study's demographic and sample consist of 80 students participating in the D3 Accounting Computerization program at STMIK Mardira Indonesia. The research utilized a purposive sampling method.

**Validity Testing:** Assesses the degree to which a measurement accurately represents the desired idea or attribute.

**Reliability Testing:** Assesses the consistency of measurement instruments or indicators within

the model using Cronbach's Alpha and Composite Reliability. Nunnally (1973) contends that an alpha coefficient of 0.7 or higher indicates reliability.

In SEM, the measurement model defines the relationship between latent variables and their associated measured variables (indicators). Arrow diagrams illustrate this paradigm by indicating the direction and strength of correlations between variables.

**Defining Latent Variables:** It clarifies how observed variables represent latent constructs.

**Establishing Relationships:** It delineates the direction and intensity of correlations between latent and observable variables.

**Parameter Estimation:** It enables the calculation of essential model parameters.

The hypothesis-testing design entails preliminary assumptions that must be verified through empirical evidence gathered during the inquiry. The researcher has formulated the following hypotheses:

Perceived Usefulness exerts a limited influence on Behavioral Intention to Use.

Perceived Ease of Use partially affects Behavioral Intention to Use.

The intention to utilize influences actual system use to a minimal extent.

## **RESULTS AND DISCUSSION**

### **Validity and Reliability Test**

The analysis performed with SmartPLS software yielded the following results:

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**Table 1. Validity and Reliability Test**

Variable	Cronbach's alpha
Actual System Use	0.924
Behavioral Intention to Use	0.880
Perceived Usefulness	0.913
Perceived Ease of Use	0.919
Variable	Composite Reliability
Actual System Use	0.915
Behavioral Intention to Use	0.851
Perceived Usefulness	0.919
Perceived Ease of Use	0.922

The Cronbach's alpha and composite reliability scores surpass 0.7, indicating that each variable exhibits strong dependability.

**Table 2. Average Variance Extracted (AVE)**

Variable	(AVE)
<i>Actual System Use</i>	0.749
<i>Behavioral Intention to Use</i>	0.644
<i>Perceived Usefulness</i>	0.743
<i>Perceived Ease of Use</i>	0.712

The Average Variance Extracted (AVE) demonstrating robust convergent validity; thus, values for each variable surpass 0.5, the model meets the validity criteria.

**Table 3. R-square**

Variable	R-square	Adjusted R-square
Actual System Use	0.625	0.621
Behavioral Intention to Use	0.790	0.785

The R-square value assesses the impact of independent variables on the dependent latent variables. The data presented in the table above indicate the following results: a. All exogenous factors (Perceived Usefulness and Perceived

Ease of Use) concurrently affect Behavioral Intention to Use, yielding an  $R^2$  value of 0.790 (79%). b. Behavioral Intention to Use partially affects Actual System Use, with an R Square of 0.625 (62.5%).

**Table 4. Variance Inflation Factor (VIF) Value**

Variable	VIF
AU1	2.829
AU2	3.411
AU3	4.174
AU4	3.252
AU5	2.629
BIU1	3.358
BIU2	3.947
BIU3	2.216
BIU4	2.744
BIU5	1.751

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Variable	VIF
PE1	3.607
PE2	2.441
PE3	3.605
PE4	2.630
PE5	2.053
PU1	2.760
PU2	2.936
PU3	2.157
PU4	2.730
PU5	2.852
PU6	3.014

All Variance Inflation Factor (VIF) values are below 5, indicating no multicollinearity among the constructs.

**Table 5. Discriminant Validity – (Fornell-Larcker criterion)**

Variable	AU	BIU	PU	PE
AU	0.866			
BIU	0.791	0.803		
PU	0.711	0.873	0.862	
PE	0.667	0.841	0.866	0.844

The results indicate that the item correlations for each construct exceed those with other constructs; thus, the model displays robust discriminant validity.

**Table 6. T-statistic test**

Variable	T-Stat
Actual System Use	17.470
Behavioral Intention to Use	14.419
Perceived Usefulness	16.702
Perceived Ease of Use	16.570

The T-statistics for all variables exceed 1.96, indicating that each variable has a significant impact on the model.

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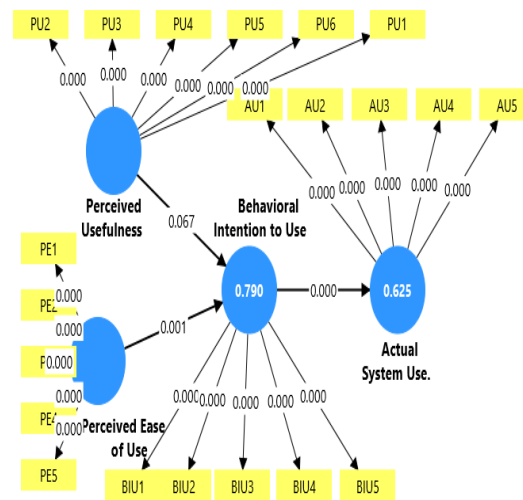


Figure 1. Hypothesis Testing (P-Value)

Table 7. P-Value

Variable	P-Value
Perceived Ease of Use > Behavioral Intention to Use	0.001
Perceived Usefulness > Behavioral Intention to Use	0.067
Behavioral Intention to Use > Actual System Use	0.000

The final phrase indicates that Behavioral Intention to Use has a significant influence; nonetheless, the reported p-value is  $P > 0.05$ . For a variable to exhibit a significant impact in statistical analysis, the p-value must be less than the predetermined threshold ( $P < 0.05$  or  $P < 0.01$ ).

## CONCLUSION

The researcher concludes that the measurement model demonstrates outstanding reliability and validity, as indicated by Cronbach's alpha and composite reliability values exceeding the required thresholds, along with an Average Variance Extracted (AVE) exceeding 0.5. The findings of the hypothesis test using P-values indicate that Perceived Ease of Use significantly affects Behavioral Intention to Use ( $P < 0.05$ ),

whereas Perceived Usefulness does not ( $P > 0.05$ ). The results indicate that Behavioral Intention to Use significantly influences Actual System Use ( $P < 0.05$ ). Moreover, the T-statistics and corresponding P-values demonstrate that only Perceived Usefulness exerts a substantial direct effect on Actual System Use ( $T > 1.96$ ,  $P < 0.05$ ). Conversely, Perceived Ease of Use did not have a direct impact on Actual System Use ( $T < 1.96$ ,  $P > 0.05$ ).

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