Applied Information System and Management (AISM)
Volume 8, (1) 2025, p. 95–102
P-ISSN: 2621-2536; E-ISSN: 2621-2544; DOI: 10.15408/aism.v8i1.42324

Assessing the Acceptance and Trust in Student Information Systems Through a Modified TAM Perspective

Muhammad Taufik Nur Hidayat[1*], Taqwa Hariguna[2], Dhanar Intan Surya Saputra[3]

***Abstract*—The rapid development of information technology has motivated universities to implement technology-based student information systems to enhance the efficiency and effectiveness of student data management. This research seeks to evaluate acceptance and trust in student information systems at universities using a modified version of the Technology Acceptance Model, incorporating perceived trust as an additional variable. The study involved a sample of 200 active university students, with data analyzed using the structural equation modeling approach. Findings from the analysis show that both perceived usefulness and perceived ease of use significantly impact students' intention to adopt the system, which in turn influences actual system usage. Additionally, perceived trust emerged as a critical factor in reinforcing both the intention to use and the subsequent actual use of the student information system. The results indicate that the intention to use the system acts as an essential mediator in the relationships between students' perceptions of usefulness, ease of use, trust, and their actual usage behavior. These results have significant implications for universities aiming to improve the adoption of student information systems. Enhancing user experience, building system trust, and ensuring robust security should be prioritized in the development and refinement of such systems. By focusing on these aspects, institutions can foster higher acceptance and sustained usage, leading to more effective student data management and a better overall educational experience.**

***Index Terms*—SEM, student site, TAM, UNPERBA, user experience.**

I. Introduction

The rapid development of information and communication technology has profoundly transformed various fields, especially education. As universities strive to adopt more efficient technological solutions, student information systems have become critical tools for managing academic and administrative activities. Universitas Perwira Purbalingga (UNPERBA) has implemented a technology-based student information system to streamline services for students. However, the true effectiveness of such systems depends on their acceptance and satisfaction among the users students.

To evaluate and understand this acceptance, the Technology Acceptance Model (TAM) is used. Developed by Fred Davis in 1989, TAM was designed to explain user behavior regarding information systems. The model highlights two core variables: Perceived Usefulness (PU) the degree to which a user believes that a system enhances their job performance and Perceived Ease of Use (PEOU) the degree to which the system is free from effort. Both variables are recognized as essential factors influencing behavioral intentions toward using a system. TAM has since been widely applied and refined in various technology adoption studies due to its robust ability to predict user acceptance in multiple contexts.

In the context of a student information system, TAM is particularly significant because it provides a structured method to assess how students perceive the system and how their perceptions shape their intention to use it. For example, if students believe that the system is beneficial for their academic success and easy to navigate, they are more likely to use it actively, improving the university's operational efficiency and enhancing student engagement. Conversely, systems that are perceived as cumbersome or lacking in practical value can lead to low adoption rates and dissatisfaction, thereby hindering the institution's goals.

The growing importance of digital learning environments makes TAM's application even more relevant today. With universities increasingly turning to online platforms for both academic and administrative functions, understanding the factors that drive or impede technology adoption has become a priority. Research shows that user-friendly interfaces, useful features, and trust in system security are essential for the successful implementation of technology in educational

Received: 9 November 2024; Revised: 25 December 2025; Accepted: 7 May 2025
*Corresponding author.

[1*]M. T. N. Hidayat, Universitas Amikom Purwokerto, Indonesia (e-mail: muhammadtaufik841@gmail.com).
[2]T. Hariguna, Universitas Amikom Purwokerto, Indonesia (e-mail: taqwa@amikompurwokerto.ac.id).
[3]D. I. S. Saputra, Universitas Amikom Purwokerto, Indonesia (e-mail: dhanarsaputra@amikompurwokerto.ac.id).

settings.

Furthermore, TAM's flexibility allows for the inclusion of additional factors that might impact technology acceptance. In this study, Perceived Trust has been integrated into the TAM framework to evaluate whether students' confidence in the system's security, privacy, and reliability influences their usage. By expanding the model, this research aims to provide a more comprehensive understanding of how student information systems are accepted, particularly in a context where data security and user trust are increasingly important.

Thus, this study focuses on applying the Technology Acceptance Model to the student system at UNPERBA. By examining factors like usefulness, ease of use, and trust, the research aims to uncover insights into how these elements shape students' intentions to use the system. These insights are expected to guide future improvements in the system, ensuring a more effective and user-friendly experience for students.

II. Related Work

PU is a fundamental construct in the TAM that has been widely acknowledged for its role in influencing actual system use. [1] defines PU as the degree to which a person believes that using a specific system enhances their job performance. When users perceive a system as beneficial and capable of improving their productivity or effectiveness, their likelihood of adopting and continuously using the system increases [2], [3]. This positive relationship is supported by numerous studies that highlight how PU acts as a key driver for system adoption. The stronger the perceived benefit, the more active and consistent the user engagement tends to be.

Empirical evidence from various fields, such as educational technology and enterprise systems, reinforces this relationship. For example, systems perceived as useful in enhancing task performance see higher levels of adoption among users [2], [3]. These findings underscore that the practical benefits perceived by users significantly influence their decision to engage with a system. Therefore, it is hypothesized that PU exerts a positive effect on actual system use, making it an essential element for fostering sustained system engagement.

PEOU is another pivotal factor in TAM, defined as the degree to which users believe that using a particular system will be effortless. Reference [4] posits that when a system is user-friendly, it is more likely to be adopted and integrated into users' routines. The rationale behind this hypothesis is that ease of use minimizes the cognitive and technical barriers associated with system interaction, making users more inclined to continue using it.

Research by [5] confirmed that PEOU directly correlates with actual system use, suggesting that the simpler a system is to operate, the higher the probability that users will adopt and sustain its use. This relationship is particularly evident in digital platforms where user experience directly impacts user retention. Thus, perceived ease of use plays a crucial role in influencing actual system use, as it lowers resistance to adoption and enhances user satisfaction. Systems that prioritize intuitive designs and straightforward navigation are more likely to witness greater usage rates.

Perceived trust (PT) represents users' belief in the reliability, safety, and trustworthiness of a system. Trust is particularly vital in online and digital environments where concerns about security and data privacy can deter usage. Studies conducted by [6] and [7] have demonstrated that higher levels of perceived trust encourage consistent and frequent use of systems, especially in domains where trust is paramount, such as e-commerce and e-learning.

The significance of perceived trust lies in its ability to reduce users' apprehensions regarding system reliability. When users trust a system to safeguard their data and provide secure interactions, their commitment to using the system strengthens. This hypothesis aligns with the broader understanding of trust as a critical factor in user acceptance and continued engagement with digital platforms. Therefore, it is anticipated that perceived trust positively affects actual system use by fostering user confidence and encouraging ongoing utilization.

The link between PU and the intention to use a system has been well-documented in prior research. For instance, studies by [8] and [9] have highlighted that when users perceive a system as valuable for achieving their professional or academic goals, their intention to use the system strengthens. This relationship underscores the idea that perceived benefits contribute significantly to shaping users' behavioral intentions.

In various contexts, including e-learning and business applications, the positive correlation between PU and usage intention has been validated [9], [10]. Users who acknowledge the utility of a system are more likely to demonstrate a strong intention to integrate it into their daily activities. This hypothesis, therefore, reinforces the importance of PU as a driving factor behind users' willingness to adopt and engage with technology.

PEOU has been shown to significantly influence users' intention to adopt technology. The premise is that when users find a system easy to navigate and operate, their likelihood of forming a positive intention to use it increases. Reference [11] stated that systems requiring minimal effort lead to higher user interest, as ease of use facilitates a more seamless user experience.

Further supporting this, [12] discovered that systems that do not pose cognitive or technical challenges promote greater user intention to use. This is particularly relevant for new or complex technologies where initial impressions based on usability can determine user adoption. Therefore, systems that prioritize PEOU tend to see stronger user intentions to engage, confirming the positive relationship between ease of use and usage intention.

PT is integral in shaping users' intentions to use a system, especially in online environments where security and data privacy are major concerns. Research by [13] supports this hypothesis, showing that trust fosters a sense of security, thereby enhancing users' intention to use the system. Users who trust a system's integrity, reliability, and security features are more likely to express a strong desire to use it.

This relationship is critical in settings where trust serves as a

Applied Information System and Management (AISM)
Volume 8, (1) 2025, p. 95–102
P-ISSN: 2621-2536; E-ISSN: 2621-2544; DOI: 10.15408/aism.v8i1.42324

primary motivator for user engagement, such as in digital services and e-commerce. High levels of trust create a foundation for users to feel comfortable and confident in their interactions with the system. Thus, perceived trust is hypothesized to positively affect intention to use, underscoring its role in the broader technology acceptance process.

Behavioral intention is widely regarded as a reliable predictor of actual system use. Within TAM, intention to use is understood to be a direct precursor to actual usage behavior. Studies have consistently supported this premise, including work by [15], who applied the Theory of Planned Behavior (TPB) to show that usage intention is a significant determinant of user behavior [13], [14].

The relationship between intention and actual use is essential for understanding how users transition from consideration to action. High levels of intention often translate into frequent and sustained usage, as individuals who express a strong intention to use a system are more likely to follow through with that behavior. Therefore, it is hypothesized that intention to use positively correlates with actual system use, validating the predictive nature of behavioral intentions.

Research indicates that PU can influence actual system usage through the mediating effect of intention to use. Studies by [16] and [17] illustrate that users who recognize the benefits of a system are more inclined to form a strong usage intention, which subsequently leads to actual use. This suggests that the relationship between PU and actual use is not purely direct but is facilitated by intention [16], [17].

This mediated relationship emphasizes the importance of intention as an intermediary variable that bridges the gap between users' perceptions and their actions. Systems designed to highlight their usefulness are more likely to stimulate intentions that, in turn, drive actual engagement. Thus, the hypothesis posits that PU has a positive effect on actual system use through the mediating role of intention.

PEOU is also found to impact actual system use through the mediating role of intention. According to [13], systems perceived as easy to use foster stronger usage intentions, which then translate into increased actual use. This sequence underscores the idea that while ease of use can directly influence use, its effect is often amplified through the user's intention.

The mediation model highlights that user-friendly systems not only lower barriers to adoption but also motivate stronger intentions that lead to more consistent use. The hypothesis thus states that PEOU positively affects actual system use when mediated by intention, reinforcing the dual pathway of direct and mediated effects in technology adoption.

PT similarly impacts actual system use via the mediating role of intention. Study [12] provided evidence that trust enhances user intention to adopt a system, which in turn promotes sustained and frequent usage. This mediated pathway shows that trust acts as a foundational element that not only inspires intention but also supports consistent system use.

Trust-related concerns, particularly in online and data-sensitive systems, are often mitigated when users perceive the platform as secure and reliable. As such, this hypothesis posits that perceived trust exerts a positive effect on actual system use, mediated by the intention to use. The relationship underscores the importance of fostering trust to boost user commitment and system engagement.

III. Research Method

In this study, an online self-assessment questionnaire survey was conducted between July and September 2024 to collect data from UNPERBA students who had prior experience using the student system in their academic activities. The survey aimed to capture users' perceptions and interactions with the system, ensuring that responses reflected relevant and current experiences. The chosen period allowed sufficient time to gather a substantial dataset, capturing a range of student perspectives and ensuring seasonal variations in system use were accounted for.

A data screening process was applied to enhance the validity and reliability of the collected responses. This screening was crucial to exclude participants who had not used the student system for more than six months, as prolonged inactivity could lead to recall bias or irrelevant feedback. By focusing on more active users, the study minimized potential biases that might have skewed the analysis. As a result, only data from respondents with recent and relevant system usage were retained for further examination.

Out of an initial pool of 191 respondents, the data screening process refined the dataset to 66 usable entries. This selection ensured that the final dataset was both representative and reliable, focusing on participants whose engagement with the student system was current and reflective of its real-world use. Table 1 illustrates the demographic composition of these respondents, providing insight into the distribution of characteristics such as age, gender, and academic background, which are essential for contextualizing the findings.

Table 1.
Respondent Demographics

Characteristics	Items	Frequency	Percentage
Gender	Male	100	52.6%
	Female	91	47.4%
Age	16 - 20	44	23.2%
	21 - 25	90	46.3%
	> 26	57	30.3%
Education Level	High School	70	36.6%

System usage	Undergraduate	60	31.4%
	Graduate	61	31.9%
	> 1 Year	77	40.3%
	< 1 Year	114	59.7%

The survey was structured into two main sections to comprehensively address the research objectives. The first part gathered demographic information, such as age, gender, and academic background, to provide context for analyzing the respondent group. This initial section was crucial for understanding the composition of participants and ensuring that subsequent data interpretations considered demographic factors.

The second part of the survey focused on measuring the research hypotheses, using questions derived from validated scales and existing literature to ensure reliability and alignment with previous studies. The questionnaire's validity was confirmed through established pre-testing methods, reinforcing its credibility for data collection. A seven-point Likert scale was employed for these questions, enhancing the precision of responses by offering a range that captured subtle differences in participant opinions and experiences. This approach facilitated a more accurate assessment of user perceptions and their relationship with system usage.

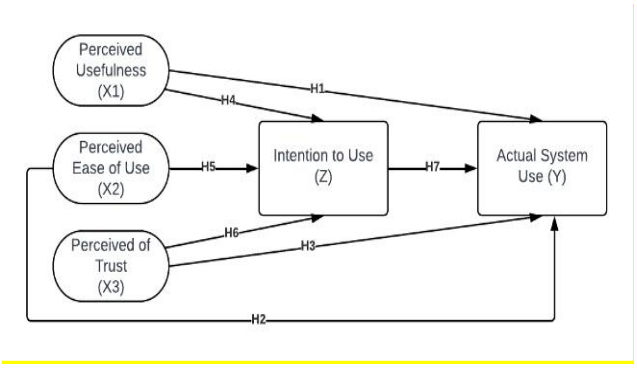

Fig. 1. Research framework.

This study also evaluates the existence of multicollinearity between constructs through Variance Inflation Factor (VIF) analysis. VIF analysis is essential in determining whether independent variables are highly correlated, which could distort the regression results and reduce the interpretability of the model. The VIF values in this study ranged from 1.000 to 4.649, indicating that multicollinearity was not present among the latent constructs. These values fall well within the accepted threshold, ensuring that the constructs could be analyzed without the risk of multicollinearity affecting the results.

The finding aligns with the guidelines provided by [18] and [19], who recommend that a VIF value below 5.0 is necessary to maintain the model's relevance and stability. By confirming that the VIF values were within this range, the study could confidently proceed with its analysis, knowing that multicollinearity would not compromise the relationships examined between the variables. This step reinforced the robustness of the study's analytical framework, supporting the validity of the subsequent findings and interpretations.

Table 2.
Results of Inner VIF

Construction	VIF
X1 → Y	1.000
X2 → Y	4.649
X3 → Y	3.899
X1 → Z	4.455
X2 → Z	4.122
X3 → Z	3.899
Z → Y	4.170

IV. Result

This study utilized SmartPLS 3 software to facilitate the measurement and analysis processes, leveraging the partial least squares (PLS) method for structural equation modeling. The software's capabilities allowed for efficient handling of complex models and the simultaneous evaluation of multiple relationships between constructs. Table 3 details the specific measurement items employed in the study, which were derived from established sources to ensure methodological consistency and theoretical alignment.

During the measurement stage, reliability and validity assessments were conducted to confirm the robustness of the constructs. This included evaluating internal consistency using Cronbach's alpha and composite reliability, as well as assessing convergent and discriminant validity to validate the relationships among constructs. In the subsequent analysis stage, the structural model and path coefficients were evaluated to test the proposed hypotheses and examine the directional relationships between practices X1, X2, X3, Z, and Y. Each construct was represented by a series of indicators previously explored and validated in related studies, ensuring that the measurement model adhered to established theoretical frameworks.

Table 3.
Questionnaire Measurement Items

Measured Items	
Variable X1, source: [8], [20], [21]	
Increased Productivity	Do you agree that using this application provides significant benefits in your academic activities?
	Do you agree that this application is effective in improving your efficiency or performance in completing college assignments?
Consistent Use of Features	To what extent do you agree that this application provides useful solutions or makes your academic work easier?
	Do you agree that the features provided by this application provide significant benefits in your student activities?
Variable X2, source: [22]–[24]	
Ease of	Do you agree that the user interface of this application is intuitive and easy to understand?

Applied Information System and Management (AISM)
Volume 8, (1) 2025, p. 95–102
P-ISSN: 2621-2536; E-ISSN: 2621-2544; DOI: 10.15408/aism.v8i1.42324

Navigation	To what extent do you agree that this application does not require excessive effort or a long time to complete the desired task?
Learning Time	Do you agree that this application is easy to navigate without experiencing major difficulties?
	How much do you agree that using this application does not require external assistance or additional training?
Variable X3, source: [25]–[27]	
Data Security	Do you agree that this application can keep your data secure and private well?
	To what extent do you agree that this application can be relied upon to provide services or information that are truly useful to you?
Performance Consistency	Do you agree that this application can be relied upon to provide accurate and consistent results?
	How confident are you that this application can be relied upon to provide services or information that are truly useful to you?
Variable Z, source: [25], [27], [28]	
Intention of Long-Term Use	How much do you agree that your intention to continue using this app in the long term is strong enough?
	Do you agree that you intend to try new features or use this application more intensively in the future?
Intent for Feature Exploration	To what extent do you agree that you plan to integrate the use of this application into your academic routine or activities?
	Do you agree that you will continue to use this application even if there are other alternatives available?
Variable Y, source: [29], [30]	
Frequency of Use	How often do you agree that you use this application in your daily activities or in an academic context?
	Do you agree that you use all the features provided by this application regularly, or only a small part of them?
Effectiveness of Use	To what extent do you agree that using this application has increased your efficiency or productivity in specific academic activities or tasks?
	Do you agree that your use of this application reflects your preference in choosing this application over other available alternatives?

This study utilized SmartPLS 3 software to facilitate the measurement and analysis processes, leveraging the partial least squares (PLS) method for structural equation modeling. The software's capabilities allowed for efficient handling of complex models and the simultaneous evaluation of multiple relationships between constructs. Table 3 details the specific measurement items employed in the study, which were derived from established sources to ensure methodological consistency and theoretical alignment.

The Partial Least Squares (PLS) method was chosen over other structural equation modeling (SEM) techniques due to its flexibility and suitability for exploratory research. PLS is particularly effective for assessing causal relationships between variables while handling both measurement and structural models simultaneously. This dual capability allows for the evaluation of complex predictive models involving numerous constructs, making it ideal for studies with interrelated variables like X1, X2, X3, Z, and Y. Additionally, PLS is robust when working with smaller sample sizes and can process both reflective and formative indicators, providing an advantage over covariance-based SEM methods that primarily handle reflective indicators.

In this study, the sample size requirement for PLS analysis 5 to 10 times the number of paths in the model was satisfied, with 191 respondents and 7 paths in the model. This adherence to sampling guidelines ensured that the analysis could be conducted effectively and yielded reliable results. Despite these strengths, PLS does have certain limitations, such as a two-stage parameter optimization process that may introduce bias in the estimation of structural path coefficients. To address this, the study incorporated a thorough review by technology experts to validate the appropriateness of the measurement items. Furthermore, the absence of a global model fit standard in PLS-SEM requires researchers to exercise critical judgment when interpreting results and consider using supplementary methods for confirmatory purposes. This careful approach enhanced the robustness and trustworthiness of the study's findings.

A. Outer Model and Validation

The external model in this study was evaluated based on three primary criteria: reliability, concurrent validity, and discriminant validity. Reliability was assessed using composite reliability values, which all exceeded 0.7 an indicator of strong construct reliability. This suggests that the measurement items were consistently capturing the intended constructs. The reliability findings underscored that the survey items were robust enough to produce repeatable results, supporting the dependability of the constructs within the model.

Concurrent validity was confirmed by examining the factor loadings of each indicator, which surpassed the minimum threshold of 0.5. Additionally, the average variance extracted (AVE) values were greater than 0.5, as recommended by Fornell and Larcker, demonstrating that the constructs captured a sufficient amount of variance. These results highlight that the measurement model met established standards for convergent validity, ensuring that the indicators accurately represented their associated constructs.

Discriminant validity was validated by comparing the factor loadings of items on their own constructs against those on other constructs. The results showed that the factor loadings for individual constructs were higher than cross-loadings with other constructs, as illustrated in Tables 4 and 5. This finding indicates that the constructs were distinct from one another, fulfilling the requirement for discriminant validity. Overall, these evaluations confirmed that the external model possessed good reliability, adequate convergent validity, and strong discriminant validity, providing a solid foundation for further

structural model analysis.

Table 4.
Reliability Analysis and Convergent Validity

Measurement Construct	Measurement Items	Factor Loading	Cronbach's Alpha	Composite Reliability	AVE
Perceived Usefulness	X1.1	0.825	0.876	0.904	0.723
	X1.2	0.782			
Perceived Ease of Use	X2.1	0.809	0.773	0.838	0.772
	X2.2	0.827			
Perceived Trust	X3.1	0.822	0.797	0.824	0.790
	X3.2	0.845			
Intention to Use	Z1	0.822	0.844	0.838	0.725
	Z2	0.808			
Actual System Use	Y1	0.810	0.865	0.855	0.787

Table 5.
Discriminant Validity Discriminant Validity

	X1	X2	X3	Z	Y
X1	0.888				
X2	0.854	0.873			
X3	0.863	0.867	0.871		
Z	0.860	0.855	0.853	0.861	
Y	0.842	0.857	0.845	0.838	0.859

B. Inner Model Result and Hypothesis Testing

The findings presented in Table 6 indicate that all hypotheses were statistically significant, yielding positive results that align with the theoretical expectations. These results not only confirm the hypothesized paths but also strengthen the overall explanatory power of the model. Figure 2 further complements the insights from Table 6 by visually depicting the relationships and significance levels between the constructs. This visualization provides a clear understanding of the strength and direction of the relationships examined in the study. Table 6 offers detailed insights into the path coefficients, p-values, and t-values for each relationship, highlighting the robustness of the model and supporting the conclusions drawn from the data. In conclusion, the inner PLS model analysis validated the proposed hypotheses and confirmed the reliability of the research framework. The significant relationships observed between the constructs demonstrate the model's effectiveness in capturing the dynamics of the study variables. These findings contribute to a deeper understanding of the causal interactions among practices X1, X2, X3, Z, and Y, supporting the theoretical underpinnings of the research.

Table 6.
Summary of Inner Model Results

Hypothesis	Path Coefficient	T-Value	Results
H1	X1 → Y	0.719	6,970	Approved
H2	X2 → Y	0.893	7,518	Approved
H3	X3 → Y	0.903	6,011	Approved
H4	X1 → Z	0.750	6,873	Approved
H5	X2 → Z	0.804	6,656	Approved
H6	X3 → Z	0.723	6,738	Approved
H7	Z → Y	0.815	7,132	Approved

C. Testing Mediation Effect

In this study, the significance of the mediating variables was determined using path analysis and the Sobel test. The Sobel test is particularly useful for evaluating the indirect effects of mediation by calculating both the Z value and p-value, ensuring the rigor of the analysis. Table 7 provides the detailed results of the Sobel test, highlighting the statistical significance of each mediating pathway.

The analysis revealed that all calculated Z values for the mediating variables exceeded the threshold value of 0.01, confirming their statistical significance. This indicates that each mediating variable has a meaningful impact on the relationship between the independent and dependent variables. The presence of significant mediation effects implies that these variables serve as crucial components in explaining how the independent variables influence the outcomes.

Moreover, these findings suggest that mediating variables do not merely exist passively but actively shape the strength and direction of the relationships within the model. Understanding and including mediating variables can offer deeper insights into the mechanisms underlying the observed associations. Their consideration is essential for researchers aiming to develop a more comprehensive understanding of the causal pathways. Future studies should thus integrate mediating factors to fully grasp the complexity of these relationships and enhance the explanatory power of their models.

Table 7.
Mediation Test Results

Construction	Construct Relationships	T-Value of Path Coefficient	Sobel Test
X1 → Z → Y	X1 → Z	3,117	.0319
	Z → Y	9,021	
X2 → Z → Y	X2 → Z	5,524	.0303
	Z → Y	6,601	
X1 → Z → Y	X3 → Z	5,524	.0393
	Z → Y	3,117	

V. DISCUSSION

The results of this study indicate that all hypotheses are accepted, which provides several important implications for the University) and its student affairs system. First, the positive influence of PU on actual system use and intention to use confirms that students at the University will be more likely to use the student affairs system if they feel real benefits in

Applied Information System and Management (AISM)
Volume 8, (1) 2025, p. 95–102
P-ISSN: 2621-2536; E-ISSN: 2621-2544; DOI: 10.15408/aism.v8i1.42324

improving their academic or administrative performance. Therefore, the development of more useful features in the system, such as more efficient integration of academic services, quick access to information, and functions that support self-learning, will increase the overall use of the system. Management should focus on ensuring that the system not only meets administrative needs but also offers added value to its users.

Second, PEOU which is positively related to intention to use and actual system use shows that ease of use is a key aspect in increasing the adoption of student systems. This means that the system design should prioritize a simple and intuitive user interface. Universities can consider improving the user experience by optimizing system accessibility via mobile devices, simplifying navigation, and providing clear user guidance. This will minimize technical barriers that may reduce system use, especially for students who are less familiar with technology.

Furthermore, the acceptance of the hypothesis related to PT confirms the importance of student trust in the system used. Trust in security, data privacy, and system reliability are important factors that drive the intention and actual use of the student system. In this context, universities need to ensure that the student system is equipped with strict security features, including data encryption, secure user authentication, and protection of student information privacy. By building a trustworthy system, universities can increase student confidence in using the system without worrying about data misuse.

Another implication of this study is the important role of intention to use as a mediator in the relationship between perception (PU, PEOU, PT) and actual system use. This indicates that students' intention to use the system is the key that bridges their perception of the system with actual usage behavior. Therefore, UNPERBA needs to make additional efforts to motivate students to have a strong intention to use the system. One approach that can be taken is through an awareness campaign and training on system use, so that students better understand the benefits and ease of using the system.

Overall, the findings of this study provide guidelines for universities in developing and managing more effective student information systems. Improved functionality, usability, and security of the system will have a direct impact on student use of the system, which will ultimately improve the overall operational efficiency of the university. By considering these implications, universities can create a more supportive academic environment for students, where student information systems become a crucial tool in supporting their academic success.

VI. CONCLUSION

This study has successfully analyzed the acceptance of the student affairs system at Universitas Perwira Purbalingga (UNPERBA) using the TAM framework modified by adding the Perceived Trust variable . Based on the results of hypothesis testing, all research variables are proven to have a positive influence on the actual use of the student affairs system. PU and PEOU are proven to play a significant role in increasing students' intention to use the system (Intention to Use) and ultimately affect actual use. This shows that students are more likely to use the system if they feel its benefits and ease of operation. In addition, student trust in the system (Perceived Trust) also plays an important role in encouraging the intention and actual use of the system.

This trust is mainly related to the guaranteed security and privacy of data, as well as the reliability of the system in providing academic and administrative services. This factor underlines the importance of building a system that is not only easy to use and useful, but also safe and trustworthy for users. This study also highlights the role of Intention to Use as a mediator that bridges the relationship between students' perceptions of the system and their actual use of the system. The intention to use the system is a key factor that influences how often and how effectively students use the student system at the University.

Overall, this study provides practical implications for student system managers at universities. To increase student adoption and satisfaction with the system, it is necessary to improve the usability, ease of use, and security aspects of the system. These findings also provide guidance for the development of a more effective student system, where the focus on user experience, reliability, and security are top priorities in the development of technology-based systems in higher education environments.

REFERENCES

[1] S. D. Lestari, F. M. Leon, S. Widyastuti, N. A. Brabo, and A. H. P. K. Putra, "Antecedents and consequences of innovation and business strategy on performance and competitive advantage of SMEs," *J. Asian Financ. Econ. Bus.*, vol. 7, no. 6, pp. 365–378, 2020, doi: 10.13106/JAFEB.2020.VOL7.NO6.365.

[2] J. John and R. Thakur, "Long term effects of service adaptations made under pandemic conditions: the new 'post COVID-19' normal," *Eur. J. Mark.*, vol. 55, no. 6, pp. 1679–1700, Jan. 2021, doi: 10.1108/EJM-08-2020-0607.

[3] S. Kimiagari and N. S. Asadi Malafe, "The role of cognitive and affective responses in the relationship between internal and external stimuli on online impulse buying behavior," *J. Retail. Consum. Serv.*, vol. 61, no. June 2020, p. 102567, 2021, doi: 10.1016/j.jretconser.2021.102567.

[4] I.-L. Wu and J.-L. Chen, "An Extension of Trust and TAM Model with TPB in the Initial Adoption of Online Tax: An Empirical Study," *Int. J. Hum. Comput. Stud.*, vol. 62, no. 6, pp. 784–808, 2005, doi: https://doi.org/10.1016/j.ijhcs.2005.03.003.

[5] M. C. Lee, "Explaining and predicting users' continuance intention toward e-learning: An extension of the expectation-confirmation model," *Comput. Educ.*, vol. 54, no. 2, pp. 506–516, 2010, doi: 10.1016/j.compedu.2009.09.002.

[6] M. F. Farah, M. J. S. Hasni, and A. K. Abbas, "Mobile-banking adoption: empirical evidence from the banking sector in Pakistan," *Int. J. Bank*

Mark., vol. 36, no. 7, pp. 1386–1413, Jan. 2018, doi: 10.1108/IJBM-10-2017-0215.
[7] S.-C. Chen, S.-C. Liu, S.-H. Li, and D. C. Yen, "Understanding the Mediating Effects of Relationship Quality on Technology Acceptance: An Empirical Study of E-Appointment System," *J. Med. Syst.*, vol. 37, no. 6, p. 9981, 2013, doi: 10.1007/s10916-013-9981-0.
[8] M. Amin, S. Rezaei, and M. Abolghasemi, "User satisfaction with mobile websites: the impact of perceived usefulness (PU), perceived ease of use PEOU and trust," *Nankai Bus. Rev. Int.*, vol. 5, no. 3, pp. 258–274, Jan. 2014, doi: 10.1108/NBRI-01-2014-0005.
[9] P. Thusi and D. K. Maduku, "South African millennials' acceptance and use of retail mobile banking apps: An integrated perspective," *Comput. Human Behav.*, vol. 111, no. July 2019, 2020, doi: 10.1016/j.chb.2020.106405.
[10] K. Owusu Kwateng, K. A. Osei Atiemo, and C. Appiah, "Acceptance and Use of Mobile Banking: an Application of UTAUT2," *J. Enterp. Inf. Manag.*, vol. 32, no. 1, pp. 118–151, Jan. 2019, doi: 10.1108/JEIM-03-2018-0055.
[11] T. Zhang, C. Lu, and M. Kizildag, "Banking 'on-the-go': Examining Consumers Adoption of Mobile Banking Services," *Int. J. Qual. Serv. Sci.*, vol. 10, no. 3, pp. 279–295, 2018, doi: 10.1108/IJQSS-07-2017-0067.
[12] D. Chawla and H. Joshi, "Consumer attitude and intention to adopt mobile wallet in India – An empirical study," *Int. J. Bank Mark.*, vol. 37, no. 7, pp. 1590–1618, Jan. 2019, doi: 10.1108/IJBM-09-2018-0256.
[13] M. A. Nugroho and M. Andryzal Fajar, "Effects of Technology Readiness Towards Acceptance of Mandatory Web-Based Attendance System," *Procedia Comput. Sci.*, vol. 124, pp. 319–328, 2017, doi: 10.1016/j.procs.2017.12.161.
[14] W. Rafdinal and W. Senalasari, "Predicting the adoption of mobile payment applications during the COVID-19 pandemic," *Int. J. Bank Mark.*, vol. 39, no. 6, pp. 984–1002, Jan. 2021, doi: 10.1108/IJBM-10-2020-0532.
[15] S.-C. Chen, S.-C. Liu, S.-H. Li, and D. C. Yen, "Understanding the Mediating Effects of Relationship Quality on Technology Acceptance: An Empirical Study of E-Appointment System," *J. Med. Syst.*, vol. 37, no. 6, p. 9981, 2013, doi: 10.1007/s10916-013-9981-0.
[16] Y. W. Chang and J. Chen, "What motivates customers to shop in smart shops? The impacts of smart technology and technology readiness," *J. Retail. Consum. Serv.*, vol. 58, no. October 2020, p. 102325, 2021, doi: 10.1016/j.jretconser.2020.102325.
[17] M. Sholikah and S. Sutirman, "How technology acceptance model (TAM) factors of electronic learning influence education service quality through students' satisfaction," *TEM J.*, vol. 9, no. 3, pp. 1221–1226, 2020, doi: 10.18421/TEM93-50.
[18] C. K. Dewi, Z. Mohaidin, and M. A. Murshid, "Determinants of online purchase intention: a PLS-SEM approach: evidence from Indonesia," *J. Asia Bus. Stud.*, vol. 14, no. 3, pp. 281–306, Jan. 2020, doi: 10.1108/JABS-03-2019-0086.
[19] A. Wibowo, S. C. Chen, U. Wiangin, Y. Ma, and A. Ruangkanjanases, "Customer behavior as an outcome of social media marketing: The role of social media marketing activity and customer experience," *Sustain.*, vol. 13, no. 1, pp. 1–18, 2021, doi: 10.3390/su13010189.[20] P. Luarn and H. H. Lin, "Toward an understanding of the behavioral intention to use mobile banking," *Comput. Human Behav.*, vol. 21, no. 6, pp. 873–891, 2005, doi: 10.1016/j.chb.2004.03.003.
[21] A. A. Alalwan, Y. K. Dwivedi, N. P. P. Rana, and M. D. Williams, "Consumer Adoption of Mobile Banking in Jordan," *J. Enterp. Inf. Manag.*, vol. 29, no. 1, pp. 118–139, Jan. 2016, doi: 10.1108/JEIM-04-2015-0035.
[22] G. A. Putri, A. K. Widagdo, and D. Setiawan, "Analysis of financial technology acceptance of peer to peer lending (P2P lending) using extended technology acceptance model (TAM)," *J. Open Innov. Technol. Mark. Complex.*, vol. 9, no. 1, p. 100027, 2023.
[23] A. S. Al-Adwan, N. Li, A. Al-Adwan, G. A. Abbasi, N. A. Albelbisi, and A. Habibi, "Extending the technology acceptance model (TAM) to Predict University Students' intentions to use metaverse-based learning platforms," *Educ. Inf. Technol.*, vol. 28, no. 11, pp. 15381–15413, 2023.
[24] H. Abuhassna *et al.*, "Trends on using the technology acceptance model (TAM) for online learning: a bibliometric and content analysis," *Int. J. Inf. Educ. Technol.*, vol. 13, no. 1, pp. 131–142, 2023.
[25] A. Alsyouf *et al.*, "The use of a Technology Acceptance Model (TAM) to predict patients' usage of a personal health record system: The role of security, privacy, and usability," *Int. J. Environ. Res. Public Health*, vol. 20, no. 2, p. 1347, 2023.
[26] G. Premkumar and A. Bhattacherjee, "Explaining information technology usage: A test of competing models," *Omega*, vol. 36, no. 1, pp. 64–75, 2008, doi: 10.1016/j.omega.2005.12.002.
[27] J. Iskandar, A. Prasetya, Y. K. Sari, and T. A. Cahyono, "Analisis Penerimaan Sistem Informasi Akademik Universitas Bhinneka Pgri Menggunakan Integrasi Model Tpb Dan Tam," *JIPI (Jurnal Ilm. Penelit. dan Pembelajaran Inform.*, vol. 7, no. 1, pp. 254–263, 2022, doi: 10.29100/jipi.v7i1.2739.
[28] S. K. Sharma, "Integrating cognitive antecedents into TAM to explain mobile banking behavioral intention: A SEM-neural network modeling," *Inf. Syst. Front.*, vol. 21, no. 4, pp. 815–827, 2019, doi: 10.1007/s10796-017-9775-x.
[29] J. C. Ho, C.-G. Wu, C.-S. Lee, and T.-T. T. Pham, "Factors affecting the behavioral intention to adopt mobile banking: An international comparison," *Technol. Soc.*, vol. 63, p. 101360, 2020, doi: https://doi.org/10.1016/j.techsoc.2020.101360.
[30] C. Lazim, N. D. B. Ismail, and M. Tazilah, "Application of technology acceptance model (TAM) towards online learning during covid-19 pandemic: Accounting students perspective," *Int. J. Bus. Econ. Law*, vol. 24, no. 1, pp. 13–20, 2021.