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Extending the Technology Acceptance Model for Accounting Information Systems: A Comparative Analysis of Urban and Rural Users in Indonesia

Mardi[1*], Muhamad Rodi[2]

[1,2]Department of Information System, STMIK Lombok, Praya, Indonesia

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ABSTRACT (10 PT)

The adoption of Accounting Information Systems (AIS) in Indonesia remains uneven between urban and rural areas, reflecting disparities in digital competence, social conditions, and infrastructural readiness. Addressing this gap, this study extends the Technology Acceptance Model (TAM) by incorporating digital literacy, trust, and social influence, while explicitly examining the moderating role of geographical context (urban versus rural). A quantitative survey method was employed, collecting data from 300 AIS users, comprising 150 respondents from urban areas and 150 from rural areas. The data were analyzed using partial least squares structural equation modeling (PLS-SEM) and multi-group analysis. The research model positions digital literacy, trust, and social influence as antecedent variables; perceived ease of use and perceived usefulness as mediators; behavioral intention as an intervening variable; and actual system usage as the outcome variable. The findings indicate that behavioral intention is a strong predictor of actual AIS usage in both urban and rural contexts. However, significant contextual differences emerge: digital literacy and trust positively influence perceived usefulness in urban areas, while these relationships are not significant in rural settings. This result highlights the moderating role of geographical context in shaping AIS acceptance patterns. This study contributes theoretically by extending TAM through a contextualized urban–rural perspective and empirically demonstrating the heterogeneous effects of key antecedents across geographical settings. From a policy perspective, the findings suggest that strategies to promote AIS adoption should be context-sensitive, with greater emphasis on digital capability development and trust-building mechanisms in rural areas.

Corresponding Author:

Mardi,
Department of Information System, STMIK Lombok, Praya, Indonesia
Email: mardisambelia@gmail.com

1. INTRODUCTION

The development of information systems in Indonesia has experienced rapid growth in recent years. Digitalization across sectors such as government, banking, and business has driven the increasing adoption of technology-based information systems [1], [2]. According to the We Are Social report, internet penetration in Indonesia has reached 78.9% of the total population, indicating that access to technology is becoming more widespread [3]. In addition, data from the Ministry of Communication and Informatics revealed that the implementation of information systems in the business and financial sectors has increased by up to 65% over the past five years, in line with the development of digital infrastructure and government policies supporting digital transformation [4]. Other studies also demonstrate that this acceleration of digitalization has created an ecosystem that fosters technology adoption across various economic sectors [1], [5]. Despite this rapid growth, the adoption of information systems has not progressed evenly across regions, particularly between urban and rural areas, creating a critical research gap that requires further investigation.

Accounting Information Systems (AIS) have become one of the most widely implemented forms of information systems in Indonesia. AIS are applied in sectors such as manufacturing, banking, retail, and micro, small, and medium enterprises (MSMEs) to improve the efficiency of financial transaction reporting and simplify financial recording [6], [7].

A study conducted by Bank Indonesia [8] shows that 70% of medium and large-scale companies have adopted AIS in their business operations. However, the adoption rate among MSMEs remains relatively low, with only 40% of MSMEs using digital-based accounting systems [9], [10]. These findings are consistent with [11], who highlighted the digital divide between large enterprises and MSMEs in adopting accounting technologies. This disparity indicates that the benefits of AIS have not been equally realized, particularly among smaller organizations and those located outside major urban centers.

Although the benefits of AIS are clear, there are significant differences in its adoption between urban and rural communities [7], [12]. Urban communities tend to adopt technology more quickly due to better access to digital infrastructure, higher levels of digital literacy, and stronger support from modern business ecosystems [13], [14]. Conversely, rural areas face challenges such as limited internet access, lower levels of trust in digital systems, and a lack of human resources capable of understanding technology, which hinders AIS implementation [5], [15]. Other research also indicates that socio-cultural factors play a crucial role in determining the level of technology adoption in rural areas [16], [17]. These conditions highlight a contextual problem in AIS adoption that cannot be adequately explained without considering geographical and social differences.

AIS play an essential role in supporting financial and accounting management within organizations [6], [7]. With the advancement of technology, AIS have been increasingly implemented to improve operational efficiency, data accuracy, and financial reporting transparency [18], [19]. Furthermore, AIS quality contributes to enhancing organizational performance through the mediation of accounting information quality [20], [21]. However, technology adoption, including AIS, shows significant variation between urban and rural societies [1], [12]. Factors such as technology infrastructure, levels of digital literacy, and access to financial resources affect the adoption of AIS in these two regions [22], [23]. This variation underscores the need for a comprehensive analytical framework that captures both technological and contextual determinants of AIS acceptance.

The challenges of implementing AIS arise not only from technical aspects but also from human factors [7], [24]. Factors such as digital literacy, user trust, and social influence can shape users' intentions and decisions to adopt technology [17], [18]. Moreover, environmental factors such as socio-economic differences between urban and rural areas also have the potential to moderate AIS adoption [25], [26]. Previous studies show that information system quality significantly impacts operational efficiency and organizational performance [11], [27]. Additionally, effective information systems can reduce risks and increase organizational transparency [6], [28]. However, prior studies have rarely examined these factors simultaneously while explicitly comparing urban and rural contexts, representing a limitation in existing research.

To gain a deeper understanding of these differences, it is necessary to measure the factors influencing AIS adoption in both urban and rural. Several factors such as perceived usefulness, ease of use, organizational readiness, and external influence are among the main determinants of AIS adoption [14], [29]. Approaches based on the Technology Acceptance Model (TAM) and other related theories can be applied to analyze user acceptance of AIS [7], [24]. Therefore, the objective of this study is to analyze AIS acceptance by extending TAM through the integration of digital literacy, trust, and social influence, while explicitly examining geographical differences between urban and rural users.

The urgency of this research is further reinforced by national policies [4], [8]. The Indonesian government has designated digital transformation as a strategic agenda in the National Medium-Term Development Plan (RPJMN) 2020–2024, including financial sector digitalization and small business empowerment [26]. The implementation of the Electronic-Based Government System (SPBE) under Presidential Regulation No. 95 of 2018 provides the primary framework for strengthening governance through information systems [27]. Moreover, the MSME Go Digital 2020–2024 Roadmap initiated by the Ministry of Cooperatives and SMEs emphasizes the importance of accelerating information technology adoption among MSMEs as part of national economic transformation [9], [10]. A recent study by [30] indicates that the implementation of these policies still faces significant challenges, particularly in bridging the digital divide between urban and rural areas. This condition further strengthens the relevance and practical importance of the present study.

Based on these considerations, the research problems addressed in this study include: (1) How do factors such as digital literacy, trust, social influence, perceived usefulness, perceived ease of use, and behavioral intention affect users' acceptance of AIS? (2) Are there significant differences in AIS adoption between urban and rural users?. Accordingly, this study aims to contribute theoretically by extending the Technology Acceptance Model through the inclusion of contextual and social variables, and practically by providing policy-relevant insights to support more inclusive and context-sensitive AIS implementation strategies in Indonesia [2], [15], [27].

This study develops an Accounting Information System acceptance model by extending the Technology Acceptance Model through the integration of digital literacy, trust, and social influence. Existing evidence indicates that AIS adoption in sectors such as banking has shown strong relevance [31]. Both theoretical and empirical studies suggest that digital literacy serves as a fundamental determinant of technology acceptance by enabling users to interact effectively with information systems. Empirical findings have demonstrated that users' digital competence is positively associated with perceived ease of use [7], supported by evidence of digital access disparities between urban and rural areas [12], and by studies in rural contexts such as Ghana [5]. Furthermore, advanced digital skills, including data analytics capabilities, have been emphasized as increasingly important for accounting professionals in the modern era [32]. Based on this theoretical and empirical foundation, this study proposes hypotheses that explicitly test the role of digital literacy and other determinants in shaping AIS acceptance across different geographical contexts.

H1: Digital literacy positively influences perceived ease of use (PEOU).

Both theoretical and empirical studies consistently identify trust in the system as a crucial determinant of technology acceptance. From a theoretical standpoint, trust functions as a mechanism that lowers users' perceptions of uncertainty and risk when interacting with technological systems. Empirical evidence has confirmed the pivotal role of trust across various information system contexts [18]. Studies conducted among small and medium-sized enterprises in Yemen revealed that insufficient trust represents a substantial obstacle to Accounting Information System adoption [11][1]. Comparable evidence from the banking sector further demonstrated that trust is closely associated with improvements in operational efficiency and system effectiveness [31]. Collectively, these findings suggest that trust facilitates users' perceptions of system usability, although its influence may vary across different geographical environments. Based on this rationale, the following hypothesis is proposed.

H2: Trust positively influences perceived ease of use (PEOU).

Within the Indonesian context, social influence has been shown to play a distinctive and influential role in shaping technology acceptance. Diffusion of innovation theory explains that individual adoption behavior is often embedded within and shaped by broader social systems. Empirical studies have demonstrated that encouragement from community leaders, colleagues, and social networks significantly promotes technology adoption, particularly in rural areas [17]. Additional support is provided by research that identified a strong association between Accounting Information System implementation and governance practices in rural banking institutions, where social norms and collective expectations exert considerable influence [25]. These findings indicate that social influence enhances users' perceptions of system accessibility and usability, especially in socially cohesive environments. Accordingly, the following hypothesis is formulated.

H3: Social influence positively influences perceived ease of use (PEOU).

Theoretical and empirical evidence also highlights the importance of digital literacy in shaping perceived usefulness. From a theoretical perspective, users' technological capabilities determine their ability to recognize and extract the functional benefits offered by a system. Empirical findings confirm that individuals with higher levels of digital competence are more capable of identifying system advantages and performance gains [29]. Prior studies have also reviewed how effective implementation of Accounting Information Systems contributes to improved financial performance, representing a fundamental dimension of system usefulness [22]. Furthermore, research on digital transformation has shown that enhanced system quality resulting from digitalization leads to higher perceived usefulness [33]. These findings provide a strong basis for the following hypothesis.

H4: Digital literacy positively influences perceived usefulness (PU).

Empirical literature further suggests that trust in a system contributes directly to perceived usefulness. Theoretically, systems that are considered reliable and secure are more likely to be perceived as valuable by users. Empirical studies have identified a positive relationship between accounting information quality, which represents a key system benefit, and trust-related factors within corporate environments [13]. Other studies examining determinants of information and data quality have also implicitly emphasized the role of trust as a foundational element [20]. In addition, empirical evidence indicates that social influence enhances perceived usefulness, as demonstrated in the context of tourism villages in Bali [16] and among culinary micro and small enterprises in Medan, where social and environmental factors were found to shape system usage behavior [10]. Based on this empirical support, the following hypotheses are proposed.

H5: Trust positively influences perceived usefulness (PU).

H6: Social influence positively influences perceived usefulness (PU).

The fundamental relationships within the Technology Acceptance Model, particularly the links between perceived ease of use and behavioral intention, as well as between perceived usefulness and behavioral intention, have received extensive empirical validation. Theoretically, these relationships originate from the original TAM framework introduced by Davis (1989). Empirical evidence from the Indonesian context has supported these associations [19], including studies on electronic filing system adoption [34]. Similar relationships have been observed in developing economies, where perceived usefulness was found to exert a strong influence on users' behavioral intention [14]. Additional studies demonstrated that successful Accounting Information System implementation enhances organizational performance, with behavioral intention acting as an implicit mediating mechanism [11]. These findings lead to the formulation of the following hypotheses.

H7: Perceived ease of use (PEOU) positively influences behavioral intention (BI).

H8: Perceived usefulness (PU) positively influences behavioral intention (BI).

The hypothesis proposing a relationship between behavioral intention and actual system usage is supported by robust theoretical and empirical foundations. The Information Systems Success Model positions system use as a direct consequence of users' intentions [24]. Empirical studies have shown that behavioral intention is effectively translated into actual system usage within Indonesian educational institutions [27]. Further evidence demonstrates that the application of Accounting Information System simulation models enhances governance outcomes, which inherently requires sustained and active system usage [28]. Moreover, findings from studies on village fund management reveal substantial differences in Accounting Information System implementation between urban and rural settings [26][35]. These insights provide a strong basis for the final hypothesis.

H9: Behavioral intention (BI) positively influences actual system usage (ASU).

2. RESEARCH METHOD

This research employed a quantitative approach using a survey method to investigate the factors influencing the acceptance of Accounting Information Systems in Indonesia. The target population comprised users of Accounting Information Systems operating in both urban and rural settings. A total of 300 respondents were involved in the study, evenly distributed between urban and rural areas, with 150 respondents from each context. Respondents were selected using a random sampling technique to ensure that all users had an equal probability of participation.

Data were gathered through structured questionnaires designed based on measurement constructs adapted from established studies on Accounting Information System adoption and digital platform usage in various contexts [16][27][14]. This approach ensured that the instrument captured relevant dimensions of technology acceptance while maintaining consistency with prior empirical research.

The collected data were processed using Partial Least Squares Structural Equation Modeling. This analytical technique was selected due to its suitability for examining complex research models and its strong predictive capabilities, which have been widely recognized in studies on Accounting Information Systems and technology adoption [26][19]. The analysis followed a two-stage procedure. First, the measurement model was assessed to evaluate indicator reliability, internal consistency, convergent validity, and discriminant validity. Second, the structural model was examined to test the proposed hypotheses and analyze the relationships among the constructs.

To identify potential contextual differences, a Multi-Group Analysis was conducted to compare Accounting Information System acceptance between urban and rural respondents. This approach aligns with prior research emphasizing regional disparities in digital adoption and system usage behavior [12][17]. Overall, this methodological framework allowed for a comprehensive examination of both the determinants and contextual dynamics shaping Accounting Information System adoption in Indonesia.

This study proposed an Accounting Information System acceptance model by extending the Technology Acceptance Model through the inclusion of digital literacy, trust, and social influence as external determinants. Digital literacy was hypothesized to influence both perceived ease of use and perceived usefulness, reflecting evidence that higher digital competence enhances users' ability to interact effectively with technology while also highlighting persistent digital gaps between urban and rural users [7][12].

Trust in the system was incorporated as a key explanatory factor, as previous studies have shown that insufficient trust significantly constrains Accounting Information System adoption, particularly among small and medium-sized enterprises in developing economies [11][18]. These findings suggest that trust contributes positively to both perceived ease of use and perceived usefulness. In addition, social influence was included due to its prominent role in shaping technology perceptions, especially in rural environments, where recommendations from peers, social networks, and community leaders have been shown to reinforce positive evaluations of system usability and usefulness [16][17].

The research variables consisted of Digital Literacy, Trust, and Social Influence as independent variables. Perceived Ease of Use, Perceived Usefulness, and Behavioral Intention functioned as mediating variables, while Actual System Use represented the dependent variable. Detailed operational definitions and measurement indicators for each construct are presented in Table 1.

Table 1. Operational Definitions of Research Variables

Variables	Operational Definition	Measurement Indicators	Code	Reference Sources
Digital Literacy (DL)	An individual's ability to understand, evaluate, and use computer-based accounting information system technologies to support work activities and financial decision-making.	1. Ability to use digital devices. 2. Understanding of digital accounting applications. 3. Ability to access and manage financial information online.	DL1 DL2 DL3	Al-Hattami (2024); Chen et al. (2019); Rachmawati (2019); Fahmi & Mendrofa (2023); Yudhiyati et al. (2024).
Trust (TR)	Users' confidence in the security of the accounting information system (AIS) in safeguarding the confidentiality and accuracy of financial data.	1. Security of user data within the system. 2. Confidentiality of information is well protected. 3. The system is reliable and free from errors.	TR1 TR2 TR3	Alawaqleh (2020); Al-Hattami et al. (2021); Almady (2023).
Social Influence (SI)	The extent to which individuals perceive social pressure or support from	1. Encouragement from colleagues to use AIS.	SI1 SI2	Thuan et al. (2022); Mardi et al. (2023); Dewi &

	their environment (colleagues, supervisors, and community) to use AIS.	2. Support from management or the organization. 3. Perception that many others are using AIS.	SI3	Anggiriawan (2023).
Perceived Ease of Use (PEOU)	The degree to which using AIS is perceived as easy and requires minimal effort to adapt to the system.	1. AIS is easy to learn. 2. AIS is easy to operate. 3. Clear and understandable interaction with the system.	PEOU1 PEOU2 PEOU3	Thuan et al. (2022); Nguyen & Nguyen (2020); Al-Hattami (2024).
Perceived Usefulness (PU)	The extent to which the use of AIS enhances work effectiveness, process efficiency, and the quality of work outcomes.	1. AIS improves work efficiency. 2. AIS enhances the quality of financial reporting. 3. AIS supports decision-making.	PU1 PU2 PU3	Ali & Abu-AlSondos (2020); Sunarta & Astuti (2023); Hamdy et al. (2025).
Behavioral Intention (BI)	Users' intention to continue using and further develop the use of AIS in their work in the future.	1. Intention to use AIS continuously. 2. Willingness to recommend AIS usage to others. 3. Preference for using AIS over manual systems.	BI1 BI2 BI3	Hanum et al. (2021); Saputro et al. (2024).
Actual System Use (ASU)	The actual frequency and intensity of AIS usage by users in operational activities.	1. Frequency of AIS usage in work activities. 2. Active use of core system features. 3. Duration of AIS usage.	ASU1 ASU2 ASU3	DeLone & McLean (2003); Hanum et al. (2021); Dewi & Widarjo (2024); Al-Ramahi et al. (2023).

Source: Research Data, 2025

Within the Technology Acceptance Model framework, the relationships among perceived ease of use, perceived usefulness, behavioral intention, and actual system usage have been consistently supported by empirical evidence. Prior studies have demonstrated that perceived ease of use and perceived usefulness strengthen behavioral intention, which subsequently leads to increased system usage [14][19][27]. Furthermore, empirical findings have revealed meaningful differences in Accounting Information System implementation between urban and rural contexts, underscoring the importance of comparative analysis across geographical settings [26].

Accordingly, the conceptual framework of this study emphasizes that Accounting Information System acceptance and usage are shaped by digital literacy, trust, and social influence, with their effects potentially varying depending on the urban or rural environment. The proposed relationships among the constructs are illustrated in Figure 1, which presents the hypothesized research model.

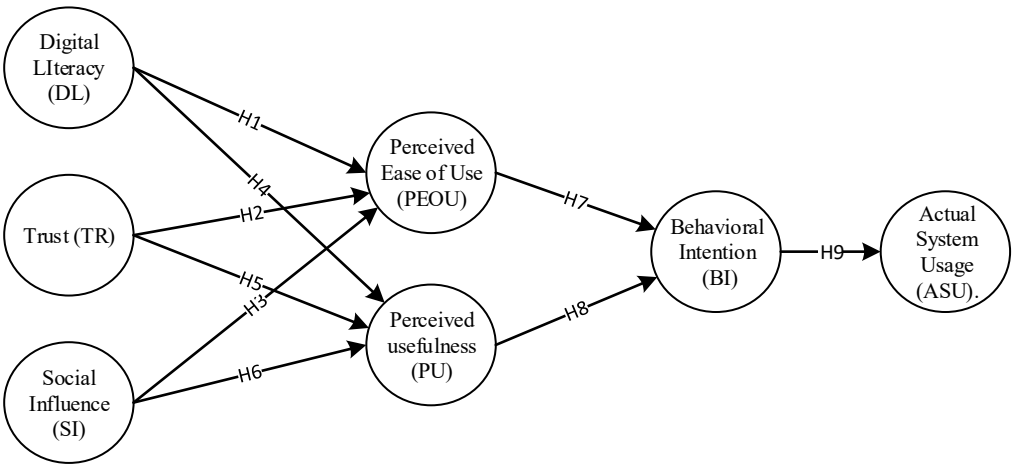

Figure 1. Conceptual Model

Source: Research Data, 2025

The structural equations of the research model are formulated as follows:

$$PEOU = \alpha + \beta 1DL + \beta 2TR + \beta 3SI + \varepsilon \quad (1)$$

$$PU = \alpha + \beta 1DL + \beta 2TR + \beta 3SI + \varepsilon \quad (2)$$

$$BI = \alpha + \beta 1PEOU + \beta 2PU + \varepsilon \quad (3)$$

$$ASU = \alpha + \beta 1BI + \varepsilon \quad (4)$$

3. RESULTS AND DISCUSSION

Descriptive Statistics

A total of 300 respondents participated in this study, evenly distributed between urban and rural areas, with 150 respondents representing each region. In terms of gender composition, 143 respondents (47.7%) were male, while 157 respondents (52.3%) were female. This indicates a slightly higher level of participation among female respondents compared to male respondents.

With respect to age distribution, the largest proportion of respondents fell within the 26–35 age group, comprising 107 individuals (35.7%). This was followed by respondents aged 36–45 years, totaling 95 individuals (31.7%). Meanwhile, 50 respondents (16.6%) were over 45 years old, and 48 respondents (16.0%) were within the 18–25 age range. Overall, this age distribution suggests that the majority of respondents were in their productive working years.

Regarding educational attainment, respondents holding a Bachelor's degree (S1) constituted the largest segment of the sample, with 120 individuals (40.0%). This was followed by Senior High School graduates numbering 75 respondents (25.0%), Diploma holders with 60 respondents (20.0%), and Master's degree (S2) holders totaling 45 respondents (15.0%). This pattern reflects that most respondents possessed a relatively strong educational background, which is likely to facilitate their understanding and adoption of Accounting Information Systems. Detailed demographic characteristics of the respondents are presented in Table 2.

Table 2. Respondent Demographic Profile

Category	Distribution	Number (n)	Percentage (%)
Region	Urban	150	50.0
	Rural	150	50.0
Gender	Male	143	47.7
	Female	157	52.3
Age	18–25 years	48	16.0
	26–35 years	107	35.7
	36–45 years	95	31.7
	>45 years	50	16.6
Education Level	High School/equivalent	75	25.0
	Diploma	60	20.0
	Bachelor's Degree (S1)	120	40.0
	Postgraduate	45	15.0

Source: Research Data, 2025

Outer Model

The evaluation of outer loading coefficients indicates that all constructs in the proposed measurement model exhibit strong psychometric quality. For the Actual System Usage (ASU) construct, the three observed indicators show very high loading values, namely 0.924 for ASU1, 0.926 for ASU2, and 0.950 for ASU3. These results suggest that the indicators represent actual system usage with a very high degree of accuracy and consistency.

Similarly, the Behavioral Intention (BI) construct demonstrates robust measurement performance. Although BI1 records a slightly lower loading value (0.889) compared to BI2 (0.932) and BI3 (0.934), all indicators exceed the recommended minimum threshold, confirming their adequacy in capturing users' behavioral intentions.

The Digital Literacy (DL) construct also presents highly consistent indicator loadings, with DL1 (0.884), DL2 (0.900), and DL3 (0.897) showing minimal dispersion and strong reliability. In the case of Perceived Ease of Use (PEOU), all indicators satisfy validity criteria; however, PEOU1 (0.837) exhibits a lower loading compared to PEOU2 (0.909) and PEOU3 (0.930), indicating potential scope for future refinement of this indicator.

For Perceived Usefulness (PU), all indicators demonstrate excellent measurement properties, with loading values of 0.885 (PU1), 0.926 (PU2), and 0.932 (PU3), reflecting a clear increase in indicator strength. The Social Influence (SI)

construct is also well measured, with SI1 (0.875), SI2 (0.911), and SI3 (0.924), where the latter two indicators show particularly strong explanatory power.

Among all constructs, Trust (TR) displays the most uniform and high-quality loadings, with TR1 (0.908), TR2 (0.919), and TR3 (0.910), indicating a stable and reliable measurement of the trust dimension.

Overall, these findings confirm that the measurement model meets the requirements of construct validity and indicator reliability. All constructs are adequately represented by their respective indicators, supporting their suitability for further structural model evaluation. The outer loading results are illustrated in Figure 2.

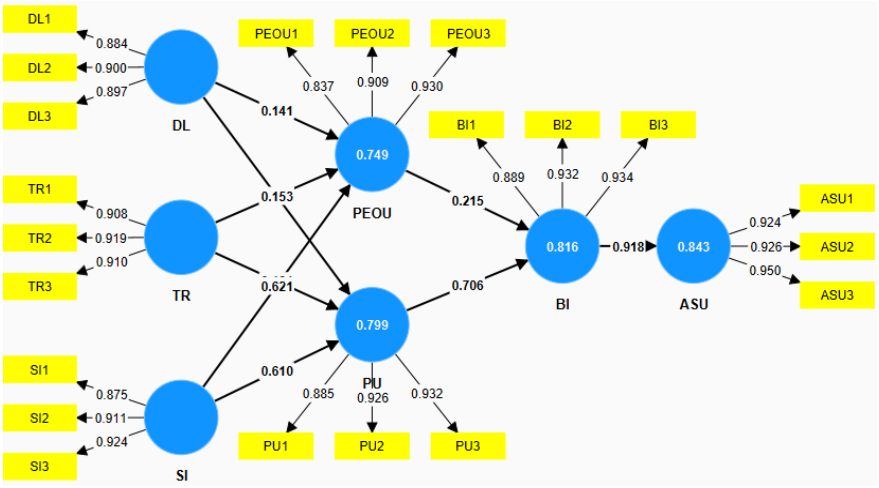

Figure 2. Outer loading values

Source: Research Data, 2025

The evaluation of the measurement (outer) model indicates that all constructs in this study satisfy the required criteria for reliability and validity, with consistently strong results. The Composite Reliability (CR) values for all latent variables fall within the range of 0.872 to 0.928, well above the recommended minimum level of 0.70. Among the constructs, Actual System Usage (ASU) exhibits the highest internal consistency with a CR value of 0.928, followed by Behavioral Intention (BI) at 0.907 and Perceived Usefulness (PU) at 0.904. These high reliability coefficients confirm that the indicators within each construct are measured in a stable and consistent manner.

In terms of convergent validity, the Average Variance Extracted (AVE) values range from 0.798 to 0.871, exceeding the accepted threshold of 0.50 for all constructs. This indicates that each latent variable explains between 79.8% and 87.1% of the variance of its observed indicators. Consistent with the reliability results, ASU records the highest AVE value at 0.871, reflecting its strong explanatory power, whereas Perceived Ease of Use (PEOU) presents the lowest AVE value at 0.798, although it remains well within acceptable limits. A summary of the complete outer model assessment is provided in Table 3.

Table 3. Outer Model Evaluation

Variable	Code	Outer	CR	AVE
ASU	ASU1	0.924	0.928	0.871
	ASU2	0.926		
	ASU3	0.95		
BI	BI1	0.889	0.907	0.844
	BI2	0.932		
	BI3	0.934		
DL	DL1	0.884	0.877	0.799
	DL2	0.9		
	DL3	0.897		
PEOU	PEOU1	0.837	0.872	0.798
	PEOU2	0.909		
	PEOU3	0.93		
PU	PU1	0.885	0.904	0.836
	PU2	0.926		

	PU3	0.932		
SI	SI1	0.875	0.888	0.817
	SI2	0.911		
	SI3	0.924		
TR	TR1	0.908	0.9	0.833
	TR2	0.919		
	TR3	0.91		

Source: Research Data, 2025

Inner Model

The results of hypothesis testing are displayed in Table 4.

Table 4. Hypothesis Test

Relations	COMPLETE		
	T statistics	P values	Result
BI -> ASU	74.296	0.000	Received
DL -> PEOU	2.034	0.042	Received
DL -> PU	2.678	0.007	Received
PEOU -> BI	3.665	0.000	Received
PU -> BI	12.557	0.000	Received
SI -> PEOU	7.443	0.000	Received
SI -> PU	7.330	0.000	Received
TR -> PEOU	1.539	0.124	Not Received
TR -> PU	1.800	0.072	Received
	URBAN		
Relations	T statistics	P values	Result
BI -> ASU	52.065	0.000	Received
DL -> PEOU	1.676	0.094	Not Received
DL -> PU	2.995	0.003	Received
PEOU -> BI	2.611	0.009	Received
PU -> BI	8.711	0.000	Received
SI -> PEOU	5.556	0.000	Received
SI -> PU	6.094	0.000	Received
TR -> PEOU	2.709	0.007	Received
TR -> PU	3.093	0.002	Received
	RURAL		
Relations	T statistics	P values	Result
BI -> ASU	59.712	0.000	Received
DL -> PEOU	1.261	0.207	Not Received
DL -> PU	1.438	0.151	Not Received
PEOU -> BI	2.118	0.034	Received
PU -> BI	8.688	0.000	Received
SI -> PEOU	6.292	0.000	Received
SI -> PU	6.196	0.000	Received
TR -> PEOU	0.014	0.989	Not Received
TR -> PU	0.417	0.677	Not Received

Source: Research Data, 2025

Based on the hypothesis testing results, this study provides nuanced insights into the acceptance of Accounting Information Systems (AIS) in Indonesia by explicitly accounting for differences between urban and rural contexts. The findings confirm that AIS adoption is not solely driven by technological characteristics but is strongly shaped by contextual, social, and infrastructural conditions. This finding reinforces the argument that technology acceptance should be interpreted as a socio-technical process rather than a purely technical decision, particularly in developing countries with heterogeneous regional characteristics such as Indonesia.

Digital Literacy (DL) demonstrates markedly different effects between urban and rural settings, highlighting the complexity of the digital divide in Indonesia. In urban areas, DL is found to significantly influence Perceived Usefulness (PU) but does not have a significant effect on Perceived Ease of Use (PEOU). The rejection of the DL–PEOU hypothesis in urban contexts can be explained through the concept of technology familiarity. For urban users who are already accustomed to digital interfaces, AIS is perceived as a commonplace tool. Their digital competence no longer merely enhances the perceived ease of use—since ease is already taken for granted—but instead enables them to extract greater strategic value and deeper benefits, such as advanced financial analysis to support decision-making. This finding is consistent with [7], who emphasizes the role of digital competence in enhancing management control effectiveness, representing higher perceived usefulness. Additional support is provided by [32], who highlight that advanced digital skills, such as big data analytics, are essential for maximizing the benefits of modern accounting information systems. These results suggest that in urban environments, digital literacy functions as a value-amplifying capability rather than a usability-enabling factor, indicating a shift from operational adoption to strategic utilization of AIS.

In contrast, in rural areas, DL does not significantly affect either PU or PEOU. The rejection of both hypotheses indicates the presence of more fundamental barriers beyond individual competence. Theoretically, this phenomenon can be explained by the digital divide framework, which encompasses not only access gaps but also usage gaps. Even when rural MSME actors possess basic digital literacy, infrastructural constraints such as poor and unstable internet connectivity [36], limited technical support, and system complexity that is misaligned with rural business contexts [30][37] neutralize the potential positive effects of digital literacy. In other words, an unsupportive environment prevents the conversion of individual competence into positive perceptions of the system. This finding underscores that improving human capital alone is insufficient in rural contexts unless it is accompanied by enabling infrastructure and system designs that reflect local operational realities.

The relationship between Trust (TR) and both PEOU and PU exhibits strong dependence on the technological environment. Trust in the system emerges as a conditional factor that is highly context-dependent. In urban areas, TR significantly influences both PEOU and PU. This finding aligns with technology trust theory, which suggests that trusted systems are perceived as easier to use because trust reduces concerns related to hidden complexity or potential errors. Trust also enhances PU, as users are confident that system outputs are reliable for decision-making purposes. These results are supported by studies in the banking sector by [31], which link trust in AIS to operational efficiency, and by [13], who associates trustworthy environments with higher-quality accounting information as a key system benefit. This indicates that in mature technological environments, trust serves as a critical mechanism that strengthens both cognitive and affective evaluations of the system.

Conversely, in rural areas, TR does not significantly influence either PEOU or PU. The rejection of these hypotheses can be theoretically explained by the premise that trust requires direct experience and adequate understanding of the object being trusted. In rural contexts, where exposure to and direct experience with AIS remain limited [5], the foundation for meaningful trust has not yet been established. Distrust, therefore, is not the root cause but rather a symptom of unfamiliarity and minimal interaction. Consequently, interventions aimed at fostering trust in rural areas should prioritize increasing system exposure and demonstrating tangible benefits, rather than relying solely on assurances of system security. This finding highlights that trust-building in rural areas is a developmental process that must precede evaluative judgments about system usefulness and ease of use.

The relationship between Social Influence (SI) and both PEOU and PU highlights the universal strength of collective norms. SI consistently and significantly affects PEOU and PU in both urban and rural settings. This finding is highly consistent with Indonesia's collectivist cultural characteristics. Theoretically, it reinforces Rogers' diffusion of innovation theory, which posits that innovation adoption decisions are strongly influenced by social systems, including recommendations from community leaders (such as village heads or religious figures), peers, and social networks. Empirically, these results align with [17], who identified the influence of recommendations on AIS adoption among MSMEs in East Lombok, as well as [16] in the context of tourism villages in Bali. Even in relatively more individualistic urban environments, social pressure from peers and industry counterparts remains a powerful driver, as also observed [14]. This consistency across contexts suggests that social influence operates as a bridging mechanism that partially compensates for technological and infrastructural limitations, particularly in rural settings.

The relationships between Perceived Ease of Use (PEOU), Perceived Usefulness (PU), and Behavioral Intention (BI) provide strong validation of the core Technology Acceptance Model (TAM). Both core TAM constructs are found to significantly influence BI. While the effect of PEOU on BI is significant in both regions, its magnitude is weaker than that of PU. This suggests that ease of use functions as a hygiene factor serving as a basic prerequisite whereby overly complex systems are rejected, but beyond a certain threshold, ease alone is insufficient to drive continued usage intentions. This

finding supports the argument that usability is necessary but not sufficient for sustaining technology adoption in professional contexts such as accounting.

The influence of PU on BI is substantially stronger than that of PEOU, yielding important theoretical implications. This dominance of PU confirms that, within the AIS context, users are more strongly motivated by perceived benefits such as time efficiency, reporting accuracy, and support for strategic decision-making than by operational simplicity alone [38]. This finding is consistent with [34] in the context of e-filing adoption and with [19], who link AIS quality to organizational performance. Thus, perceived usefulness emerges as the primary driver of intentional commitment to AIS usage across both geographical contexts.

The relationship between Behavioral Intention (BI) and Actual System Usage (ASU) confirms the theory of reasoned action. The results affirm the robustness of TAM and the theory of reasoned action within the Indonesian AIS context. BI exerts a strong and significant influence on ASU, consistent with the Information Systems Success Model proposed by [24], which positions intention and use as central components of system success. Empirically, this finding aligns with studies by [27] in Indonesia and [33] in developing countries, both of which emphasize behavioral intention as a powerful direct predictor of actual system usage. This suggests that once the intention to use AIS is formed, it is highly likely to translate into actual usage behavior. This result highlights the critical role of behavioral intention as a key leverage point for policy and managerial interventions aimed at increasing AIS utilization.

The comparative analysis between urban and rural areas reflects the broader digital divide. Overall, the polarization of results across these two contexts provides empirical support for official reports on Indonesia's digital transformation gap [4]. These findings reinforce prior research by [26][35] concerning the challenges of AIS implementation at the village level. The results clearly indicate that uniform, one-size-fits-all policy and implementation approaches are likely to be ineffective. Urban strategies should focus on enhancing value creation, system trust, and advanced digital competencies. In contrast, rural interventions must begin with foundational measures, including infrastructure provision, practical and context-specific training, system designs aligned with local business characteristics [15], and trust-building through continuous support and demonstrable benefits. This contextual differentiation constitutes the key novelty of the study by demonstrating that AIS acceptance mechanisms vary structurally across geographical environments rather than merely in intensity.

4. CONCLUSION

Based on the overall results of the hypothesis testing, it can be concluded that the acceptance of Accounting Information Systems (AIS) in Indonesia is strongly influenced by geographical context, with significant differences observed between urban and rural areas. In urban settings, AIS adoption is primarily driven by digital literacy that enhances perceived usefulness, trust in the system, and social influence. In contrast, in rural areas, social influence emerges as the most consistent driving factor, while digital literacy and trust do not exhibit significant effects. This indicates the presence of infrastructural barriers and limited technological exposure as the main impediments to AIS adoption. These findings further reinforce the validity of the Technology Acceptance Model (TAM) by confirming strong positive relationships among perceived ease of use, perceived usefulness, users' behavioral intention, and actual system usage.

From an implementation perspective, these results imply that AIS deployment strategies should be context-specific. In urban areas, strategies may focus on enhancing value creation and strengthening system security. Conversely, in rural areas, fundamental interventions are required, including infrastructure development, context-based training programs, and engagement through community leaders to establish a more solid foundation for technology acceptance.

This study is subject to several limitations. First, the moderator variable is limited to geographical location (urban versus rural) in a general sense. Other internal factors, such as firm size, industry type, and managerial education level, were not examined in depth. Second, this study employs a cross-sectional design, which restricts its ability to capture dynamic changes in AIS users' perceptions and behaviors over time. Future research is therefore encouraged to incorporate additional moderating variables, such as industry type, business complexity, or leadership style, to provide a more granular analysis. Moreover, longitudinal studies are highly recommended to map the AIS adoption trajectory and to better understand how acceptance factors evolve as users gain greater experience with the system.

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