

Enhancing User Satisfaction and Loyalty in MSMEs: The Role of Accounting Information Systems

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Abstract

This study examines the impact of Accounting Information System (AIS) attributes on User Satisfaction, Decision-Making, and Loyalty among Micro, Small, and Medium Enterprises (MSMEs). The research evaluates how Content, System Quality, Information Quality, and User Characteristics influence satisfaction and decision-making, ultimately shaping user loyalty. A quantitative approach utilizing Partial Least Squares Structural Equation Modeling (PLS-SEM) was employed to analyze responses from 62 MSME operators in East Lombok, Indonesia. The findings indicate that Content and System Quality significantly enhance User Satisfaction and Decision-Making, which in turn mediate their effects on User Loyalty. Contrary to conventional expectations, Information Quality has a minimal impact, suggesting that MSMEs prioritize system usability and functionality over informational attributes. The study reinforces the critical mediating roles of satisfaction and decision-making, highlighting how system attributes influence behavioral outcomes. In practical terms, AIS should be designed with simplicity, reliability, and relevance to MSME needs, ensuring ease of adoption and operational efficiency. Policymakers are encouraged to promote digital literacy and provide affordable AIS solutions to accelerate adoption among MSMEs. Additionally, the study suggests that future research explore broader cultural and organizational dynamics affecting AIS adoption and employ mixed-method approaches for deeper insights into user behavior.

Keywords: Accounting information systems, MSMEs, User satisfaction, System quality, User loyalty

1. INTRODUCTION

In the era of globalization and rapid advancements in information technology, competition in technology-based service industries has intensified. One of the critical determinants of success for digital platforms is user loyalty, which reflects users' propensity to repeatedly use the platform, share positive experiences, and contribute to its growth and sustainability [1], [2]. Maintaining user loyalty is crucial for ensuring the competitiveness and long-term viability of digital platforms,

particularly in dynamic business environments [3], [4]. Digital platforms, including Accounting Information Systems (AIS), provide significant benefits to their users, primarily by enhancing operational efficiency. However, user decisions to adopt AIS are not solely determined by the system's technical quality but also by user experience, perceived security, feature availability, and the quality of services and information delivered [5], [6]. These factors collectively shape the overall user experience, ultimately influencing their loyalty to the system [7].

Among Micro, Small, and Medium Enterprises (MSMEs), adopting AIS has emerged as a strategic measure to improve financial management and business decision-making. Equipped with appropriate features, AIS enables MSMEs to systematically record financial transactions, generate reliable financial reports, and provide data that supports strategic decisions [8], [9]. Despite its potential, the implementation of AIS in MSMEs continues to face challenges, including system complexity, processing speed, and data security concerns. A significant issue for MSMEs is the mismatch between system complexity and their business needs. Many AIS platforms offer sophisticated financial reporting features tailored for larger enterprises, while MSMEs often require simpler, more relevant reports [10]. Additionally, slow system performance, particularly in high-transaction environments, undermines operational efficiency and reduces user satisfaction [11], [12].

Despite the growing awareness of digitalization in MSMEs, the adoption of AIS remains hindered by several key barriers, including cost constraints, lack of technical expertise, and resistance to change. Many MSME owners perceive AIS as a complex and costly investment, making them hesitant to integrate such systems into their operations. Additionally, the limited digital literacy among MSME operators exacerbates the challenges of AIS adoption, as they often lack the necessary training and technical support to fully leverage its functionalities. Moreover, concerns regarding data security and privacy remain a significant deterrent, particularly for businesses unfamiliar with cloud-based accounting solutions [13], [14]. These barriers emphasize the need for AIS platforms that are affordable, user-friendly, and tailored to MSME requirements, ensuring that technological advancements do not become an exclusive privilege of larger enterprises. Addressing these challenges requires a collaborative effort between AIS developers, policymakers, and industry stakeholders to provide accessible training programs, digital infrastructure, and financial incentives that facilitate the adoption of AIS among MSMEs.

Another challenge is the mode of system usage offline versus online. Offline systems frequently encounter data integration difficulties, while online systems are more susceptible to data security risks and demand stable network infrastructure [13], [14]. These challenges underscore the importance of designing AIS platforms

that are flexible, secure, and aligned with user needs. Consistent with prior research, user loyalty is often driven by user satisfaction with the system. Satisfaction is achieved when the system meets user expectations in terms of service and information quality. Accurate, relevant, and timely information is crucial for supporting effective decision-making [15], [16]. On the other hand, high-quality services, characterized by ease of access, system speed, and responsive technical support, significantly enhance user satisfaction [17], [18].

Several studies have highlighted the interconnected nature of system adoption decisions, user satisfaction, and user loyalty. For instance, one study demonstrated that AIS quality significantly contributes to improving financial information quality, which subsequently enhances user satisfaction and loyalty [9], [19]. Conversely, another study found that service quality does not always positively influence user satisfaction, indicating the need to examine contextual and specific factors that shape these outcomes [20], [21].

This study examines the dynamics of AIS adoption within MSMEs in East Lombok, Indonesia, a region characterized by a high prevalence of small enterprises and nascent digital adoption. The research investigates the direct effects of AIS content, system quality, and user characteristics on user satisfaction, while exploring the mediating role of satisfaction and decision-making in influencing user loyalty. It also seeks to identify the AIS attributes that contribute most significantly to fostering loyalty among MSME users.

This study offers both theoretical and practical contributions. Theoretically, it integrates insights from the Technology Acceptance Model (TAM) and the DeLone and McLean Information Systems Success Model, providing a comprehensive framework for understanding AIS adoption in the MSME context [22]. It advances AIS research by employing Partial Least Squares Structural Equation Modeling (PLS-SEM) to model complex interrelationships among latent constructs [13]. Practically, the findings deliver actionable recommendations for AIS developers and MSME stakeholders. Identifying features that effectively enhance satisfaction and loyalty informs the design of user-centered AIS platforms tailored to MSME needs. Moreover, insights into the satisfaction and decision-making process can guide training and support initiatives, ensuring MSME users maximize the benefits of AIS implementation.

2. METHODS

This chapter outlines the research methodology employed to investigate the factors influencing user satisfaction and loyalty in the adoption of Accounting Information Systems (AIS) among Micro, Small, and Medium Enterprises (MSMEs) in East Lombok, Indonesia. The methodology was designed to systematically analyze the

relationships between AIS content, system quality, user characteristics, satisfaction, and loyalty, employing a quantitative approach grounded in Structural Equation Modeling using Partial Least Squares (PLS-SEM). The following sections detail the research design, population and sample, data collection procedures, variable definitions, and data analysis methods.

2.1. Research Design

This study adopts an associative quantitative research design, focusing on the relationships between independent, mediating, and dependent variables. The design is appropriate for exploring causal relationships and the mediating effects of user satisfaction and decision-making on loyalty. Specifically, the study evaluates the influence of AIS content, system quality, information quality, and user characteristics on user satisfaction and the subsequent impact on loyalty [23], [24]. PLS-SEM was selected as the analytical tool due to its ability to model complex latent variables and account for both direct and indirect effects, as recommended by Cepeda-Carrion, Cegarra-Navarro, and Cillo (2019) [1],[25], as shown in Figure 1.

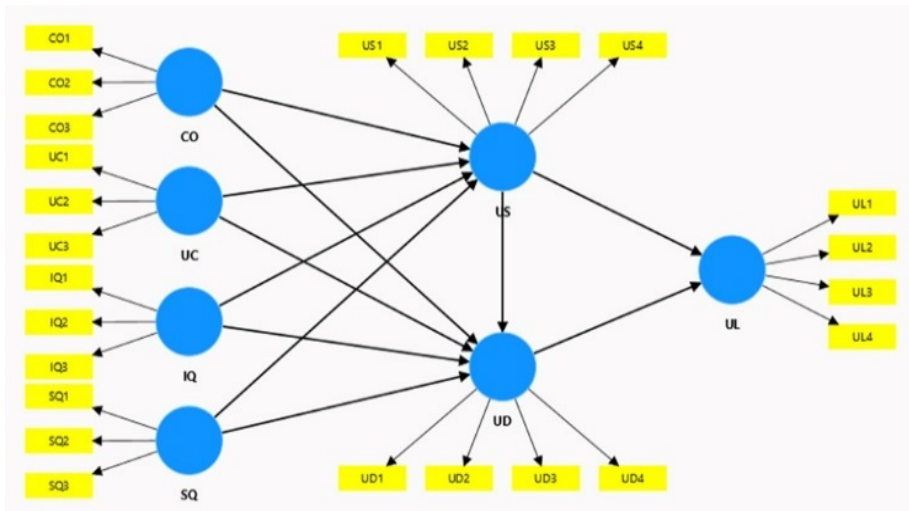


Figure 1. Conceptual Framework of AIS Adoption, User Satisfaction, and Loyalty

The mathematical equations derived from the research design are as shown in Equation 1 50 3.

$$US = \beta_1 CO + \beta_2 UC + \beta_3 IQ + \beta_4 SQ + \epsilon \quad (1)$$

$$UD = \beta_1 CO + \beta_2 UC + \beta_3 IQ + \beta_4 SQ + \beta_5 US + \epsilon \quad (2)$$

$$UL = \beta_1 US + \beta_2 UD + \epsilon \quad (3)$$

Notation:

ϵ	= Residual
$\beta_1 - \beta_5$	= Coefficients
CO	= Content
UC	= User Characteristics
IQ	= AIS Information Quality
SQ	= AIS System Quality
US	= AIS User Satisfaction
UD	= Decision to Use AIS
UL	= AIS User Loyalty

2.2. Population and Sample

The population of this study comprises MSMEs operating in East Lombok that utilize AIS in their business processes. The region was selected due to its high density of MSMEs and nascent digital adoption, making it an ideal context for studying AIS dynamics. A random sampling technique was employed to ensure representativeness, and a sample size of 62 MSME owners and operators was obtained. The sample size was deemed adequate for PLS-SEM analysis, aligning with recommendations by Hair et al. (2019) for achieving robust statistical power in small to medium-sized datasets [26],[27].

Although PLS-SEM is widely recognized for its robustness in modeling latent constructs, certain biases and limitations must be considered. One potential limitation is the sample size, as PLS-SEM typically requires a minimum of 50 to 100 observations for reliable results, depending on model complexity. To mitigate potential bias, bootstrapping with 5,000 resamples was performed to enhance the reliability of path coefficient estimations. Another limitation lies in common method bias (CMB), which occurs when data is collected from the same respondents at the same time. To address this, Harman's single-factor test was conducted, confirming that no single factor accounted for more than 50% of the variance. Furthermore, the study acknowledges the subjectivity of self-reported data, which could influence the accuracy of user perceptions regarding AIS adoption and its impacts [28], [29].

2.3. Data Collection

Data collection was conducted through structured questionnaires distributed to MSME owners and operators. The questionnaire was divided into two sections: demographic information and constructs related to AIS adoption. The constructs measured include AIS content, system quality, information quality, user characteristics, satisfaction, decision-making, and loyalty. Each item was measured using a 5-point Likert scale ranging from "strongly disagree" to "strongly agree,"

consistent with best practices in survey-based research [2],[28]. Pretesting of the questionnaire was performed with a pilot group of 10 MSME operators to ensure clarity and reliability of the items[29].

2.4. Variables and Measurement

The study's conceptual model involves multiple latent variables, operationalized as follow.

- 1) AIS Content (Independent Variable): Measured through indicators assessing the relevance and clarity of information provided by the system, including the alignment with MSME needs [30].
- 2) System Quality (Independent Variable): Evaluated through indicators related to system reliability, ease of use, and accessibility [8].
- 3) Information Quality (Independent Variable): Focused on the accuracy, timeliness, and relevance of information generated by AIS [31]
- 4) User Characteristics (Independent Variable): Assessed based on user familiarity with technology, prior experience, and technical competence [9].
- 5) User Satisfaction (Mediating Variable): Measured through user perceptions of system efficiency, usability, and overall satisfaction [32].
- 6) Decision-Making (Mediating Variable): Captured through indicators related to the perceived impact of AIS on strategic business decisions [15].
- 7) User Loyalty (Dependent Variable): Examined using metrics such as repeat usage, user engagement, and likelihood to recommend the system [5].

Each latent variable was defined and measured using a set of reflective indicators derived from previous literature to ensure validity and reliability, as shown in Table 1.

Table 1. Operational definitions of research variables

Variable	Type of Variable	Indicator	Code
Content (CO)	Independent	The system presents information that is easy to understand	CO1
		Content displayed is relevant to business needs	CO2
		Provides reports tailored to MSME needs	CO3
User Characteristics (UC)	Independent	User's level of understanding of technology	UC1
		User's ability to operate the system	UC2
		User's prior experience with the system	UC3
Information Quality (IQ)	Independent	Information provided is accurate	IQ1
		Information is relevant for decision-making	IQ2

Variable	Type of Variable	Indicator	Code
System Quality (SQ)	Independent	Information is available in a timely manner	IQ3
		The system is quickly accessible	SQ1
		The system is reliable for every transaction	SQ2
		The system has an easy-to-use interface	SQ3
User Satisfaction (US)	Intervening	Overall satisfaction	US1
		Comfort	US2
		Positive experience	US3
		The system enhances operational efficiency	US4
User Decision (UD)	Intervening	Decision to use the system based on efficiency	UD1
		The system simplifies financial report management	UD2
		The system is chosen because it meets business needs	UD3
		Provides added value in business management	UD4
User Loyalty (UL)	Dependent	Intention to continue using the system	UL1
		Recommendations	UL2
		Engagement with the system	UL3
		Frequency of use	UL4

2.5. Analytical Framework

The study employed PLS-SEM as the primary analytical technique to examine relationships between variables. PLS-SEM is well-suited for predictive and exploratory research, particularly in contexts involving complex causal models [33], [26]. The SmartPLS 4.0 software was used for structural model analysis. The analysis followed a two-step approach: evaluation of the measurement model and assessment of the structural model [34]. Measurement Model Evaluation, Convergent validity, discriminant validity, and internal consistency reliability were assessed. Convergent validity was determined through factor loadings (threshold > 0.70) and Average Variance Extracted (AVE) values (threshold > 0.50) [2]. Discriminant validity was examined using the Fornell-Larcker criterion, ensuring that each construct shared more variance with its indicators than with other constructs [35]. Structural Model Assessment, Path coefficients, R^2 values, and effect sizes (f^2) were analyzed to evaluate the relationships between constructs. Bootstrapping (5,000 resamples) was performed to test the significance of the hypothesized relationships.

2.6. Hypotheses Development

Based on theoretical underpinnings and empirical evidence, the following hypotheses were proposed.

- 1) H1: Content (CO) significantly influences User Satisfaction (US).
- 2) H2: User Characteristics (UC) significantly influence User Satisfaction (US)
- 3) H3: Information Quality (IQ) does not significantly influence User Satisfaction (US).
- 4) H4: System Quality (SQ) significantly influences User Satisfaction (US).
- 5) H5: Content (CO) significantly influences User Decision (UD).
- 6) H6: User Characteristics (UC) do not significantly influence User Decision (UD).
- 7) H7: Information Quality (IQ) does not significantly influence User Decision (UD).
- 8) H8: System Quality (SQ) significantly influences User Decision (UD).
- 9) H9: User Satisfaction (US) significantly influences User Decision (UD).
- 10) H10: User Decision (UD) significantly influences User Loyalty (UL).
- 11) H11: User Satisfaction (US) significantly influences User Loyalty (UL).

These hypotheses were tested to explore both direct and mediating effects, providing a comprehensive understanding of the relationships.

3. RESULTS AND DISCUSSION

This section presents the findings of the study, evaluating the relationships between Content (CO), User Characteristics (UC), Information Quality (IQ), System Quality (SQ), User Satisfaction (US), User Decision (UD), and User Loyalty (UL) within the framework of Accounting Information Systems (AIS). The discussion integrates results from the data analysis, linking them to existing literature and discussing theoretical and practical implications.

3.1. Measurement Model Assessment

The measurement model was evaluated for reliability and validity, ensuring the constructs were robust for analysis. Table 2 summarizes the results, including Cronbach's Alpha, Composite Reliability (CR), and Average Variance Extracted (AVE). All constructs demonstrated high reliability, with CR values exceeding 0.80 and AVE values above the acceptable threshold of 0.50 [18].

Table 2. Measurement model

Variable	Measure	Factor loading	Cronbach's alpha	CR	AVE
Content (CO)	CO1	0.874	0.837	0.902	0.755
	CO2	0.920			
	CO3	0.810			
User Characteristics (UC)	UC1	0.894	0.888	0.931	0.817
	UC2	0.893			
	UC3	0.925			
Information Quality (IQ)	IQ1	0.831	0.797	0.881	0.712
	IQ2	0.895			
	IQ3	0.804			
System Quality (SQ)	SQ1	0.815	0.842	0.905	0.761
	SQ2	0.899			
	SQ3	0.899			
User Satisfaction (US)	US1	0.885	0.922	0.945	0.811
	US2	0.908			
	US3	0.904			
	US4	0.904			
User Decision (UD)	UD1	0.850	0.908	0.936	0.784
	UD2	0.913			
	UD3	0.919			
	UD4	0.858			
User Loyalty (UL)	UL1	0.829	0.887	0.922	0.747
	UL2	0.908			
	UL3	0.891			
	UL4	0.828			

The Fornell-Larcker criterion confirmed discriminant validity, indicating constructs were distinct and adequately measured.

3.2. Structural Model Analysis

The structural model was assessed to test the hypotheses and evaluate relationships among the constructs. Key indicators included path coefficients, R^2 values, and hypothesis testing results derived from bootstrapping (See Figure 2 for the structural model results). Significant relationships were observed between several constructs. Content (CO) had a notable impact on User Decision (UD) ($\beta = 0.242$, $p = 0.018$) and User Satisfaction (US) ($\beta = 0.124$, $p = 0.027$), emphasizing the role of system relevance and clarity in shaping user experiences. Similarly, System Quality (SQ) strongly influenced US ($\beta = 0.458$, $p = 0.001$) and UD ($\beta = 0.151$, $p = 0.008$), highlighting the importance of system reliability and usability (Monteiro et al., 2021; Muda et al., 2020). Interestingly, Information Quality (IQ) did not significantly affect UD ($\beta = 0.053$, $p = 0.664$) or US ($\beta = 0.327$, $p = 0.052$), aligning with findings that operational efficiency often outweighs informational attributes in MSME.

User Satisfaction (US) emerged as a critical mediator between System Quality (SQ) and User Decision (UD), as well as between SQ and User Loyalty (UL). Satisfaction also mediated the effect of Content (CO) on User Loyalty (UL), confirming the centrality of user perceptions in AIS adoption (Scherer et al., 2019). User Decision (UD) significantly influenced User Loyalty (UL) ($\beta = 0.655$, $p < 0.001$), demonstrating its role as a pivotal factor linking system attributes to long-term commitment. The model demonstrated good fit, with an SRMR value of 0.070 and R^2 values indicating strong explanatory power for User Decision (UD = 0.838) and User Loyalty (UL = 0.746). Detailed path coefficients and hypothesis results are presented in Table 3.

The findings align with previous research, confirming that system usability and relevance are more critical for MSMEs than information quality [9], [19]. This is consistent with studies suggesting that MSMEs prioritize practical efficiency over comprehensive reporting functionalities [20]. However, the non-significant impact of Information Quality (IQ) on User Satisfaction and Decision-Making challenges traditional AIS success models, particularly the DeLone and McLean IS Success Model. This suggests that context-specific factors, such as business scale and resource constraints, play a significant role in shaping AIS adoption outcomes. Furthermore, behavioral aspects of MSME operators, including their trust in digital tools and prior experience with technology, may influence their perceptions of AIS usefulness beyond the system's intrinsic attributes [21], [22]. Future studies should explore psychological and organizational drivers that mediate AIS adoption among MSMEs to provide a more holistic perspective on digital transformation in small enterprises.

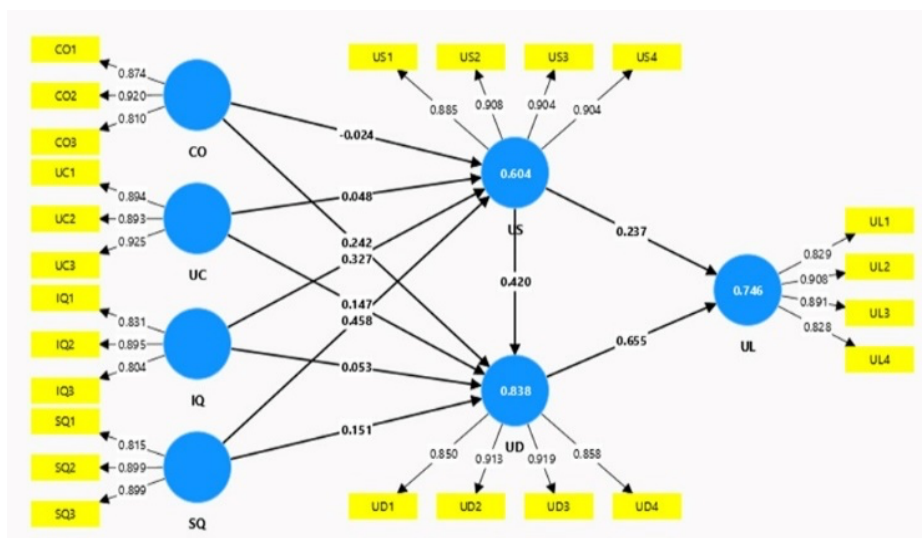


Figure 2. Structural Model

The findings affirm the critical role of Content (CO) and System Quality (SQ) in shaping user satisfaction and decisions. These attributes align with prior research emphasizing usability and relevance as key factors in technology adoption [9]. The non-significant impact of Information Quality (IQ) suggests that MSMEs prioritize system functionality over informational attributes, a trend observed in resource-constrained environments. This challenges traditional AIS models and highlights the need for context-specific considerations. The results emphasize the importance of User Satisfaction (US) and Decision-Making (UD) as mediators, consistent with the Technology Acceptance Model (TAM). These findings underscore the interplay between user perceptions and behavioral outcomes.

Table 3. Hypothesis testing results

Hypothesis	Path	Coefficient	T-Value	P-Value	Supported
H1	CO -> US	0.124	2.150	0.027	Yes
H2	UC -> US	0.048	2.266	0.023	Yes
H3	IQ -> US	0.327	1.942	0.052	No
H4	SQ -> US	0.458	3.329	0.001	Yes
H5	CO -> UD	0.242	2.369	0.018	Yes
H6	UC -> UD	0.147	1.391	0.164	No
H7	IQ -> UD	0.053	0.435	0.664	No
H8	SQ -> UD	0.151	2.429	0.008	Yes
H9	US -> UD	0.420	5.244	0.000	Yes
H10	UD -> UL	0.655	6.032	0.000	Yes
H11	US -> UL	0.237	2.136	0.033	Yes

The findings offer actionable insights for enhancing AIS design and adoption, contributing to academic understanding and practical applications.

3.3. Theoretical and Practical Implications

The findings affirm the critical role of Content (CO) and System Quality (SQ) in shaping user satisfaction and decisions. These attributes align with prior research emphasizing usability and relevance as key factors in technology adoption [9].

1) Theoretical Contribution

This study extends the Technology Acceptance Model (TAM) and the DeLone & McLean IS Success Model by emphasizing the mediating roles of User Satisfaction (US) and Decision-Making (UD) in shaping User Loyalty (UL). The results suggest that contextual differences in MSME operations necessitate modifications to existing AIS frameworks, particularly in environments with limited digital infrastructure and varying levels of digital literacy.

2) Practical Contribution

The study provides actionable insights for AIS developers, policymakers, and MSME stakeholders. Given that Content (CO) and System Quality

(SQ) are the strongest predictors of satisfaction, AIS developers should focus on creating simple, reliable, and tailored systems that address MSME operational constraints. Additionally, policy interventions should prioritize digital literacy programs and subsidies for AIS adoption, ensuring that cost and complexity do not deter MSMEs from adopting digital financial tools.

3.4. Discussion

The results of this study provide meaningful insights into the adoption and effectiveness of Accounting Information Systems (AIS) in the context of Micro, Small, and Medium Enterprises (MSMEs). By examining the relationships between content, user characteristics, system quality, information quality, user satisfaction, user decision-making, and user loyalty, the study offers a holistic understanding of how users interact with AIS platforms. The assessment of the measurement model confirmed that the constructs used in the study were both reliable and valid, with strong internal consistency and convergent validity (as shown in Table 2). This reinforces confidence in the robustness of the measurement tools and provides a solid foundation for structural model evaluation.

The structural model results (Figure 2) revealed several significant findings. Content (CO) and System Quality (SQ) emerged as critical drivers of User Satisfaction (US) and User Decision (UD), suggesting that the clarity, relevance, and usability of system features are paramount in determining user outcomes. This is particularly aligned with previous research indicating that MSMEs, operating in resource-constrained environments, value operational efficiency and interface reliability over complex information reporting features [9], [19], [20].

Contrary to conventional AIS success models like the DeLone and McLean IS Success Model, Information Quality (IQ) was found to have no significant impact on either User Satisfaction or User Decision. This deviation emphasizes the need to consider contextual factors—such as digital maturity, technical resources, and user experience levels—when evaluating AIS success within MSMEs. For many small businesses, easily accessible and functional systems outweigh the perceived value of information depth and granularity.

User Satisfaction (US) played a pivotal mediating role in linking both Content and System Quality to User Decision and User Loyalty (UL). Likewise, User Decision significantly influenced loyalty, underscoring the importance of behavioral intention as a bridge between system experience and sustained usage. These relationships align closely with the Technology Acceptance Model (TAM), which highlights the influence of user perceptions on system adoption and long-term commitment.

Table 3 confirms the statistical support for most hypothesized relationships. Notably, paths such as $CO \rightarrow US$, $SQ \rightarrow US$, and $UD \rightarrow UL$ were strongly supported, reinforcing the idea that relevance and system usability are key to fostering user trust and loyalty. Conversely, the non-significant paths from IQ to US and UD (H3 and H7) challenge traditional assumptions and call for further investigation into how different organizational contexts may reshape technology acceptance patterns.

The findings have important theoretical implications. They extend TAM and the DeLone & McLean IS Success Model by introducing a context-sensitive perspective, showing that the value derived from AIS is not uniform across sectors. In MSMEs, decision-making and satisfaction are not solely dependent on information depth but are significantly influenced by interface simplicity, ease of use, and functional relevance. This calls for theoretical adaptations to existing models when applied in digitally evolving environments.

From a practical standpoint, the results suggest that AIS developers should prioritize features that enhance usability and content relevance while maintaining system reliability. Developers must consider the operational constraints of MSMEs and design AIS platforms that are both intuitive and adaptable to varying levels of digital literacy. Policymakers and support agencies can use these insights to advocate for digital adoption through targeted training programs, subsidies, and low-cost implementation models that remove common adoption barriers. This study provides a valuable framework for understanding and enhancing AIS adoption in MSMEs. It highlights the need for both theory and practice to adapt to the unique operational landscapes of smaller enterprises, ensuring that technology implementation is both impactful and inclusive.

4. CONCLUSION

This study examined the impact of Accounting Information System (AIS) attributes Content, System Quality, Information Quality, and User Characteristics on User Satisfaction, User Decision-Making, and User Loyalty within the context of Micro, Small, and Medium Enterprises (MSMEs). The findings revealed that Content and System Quality significantly influence User Satisfaction and Decision-Making, which in turn mediate their relationship with User Loyalty. However, Information Quality showed limited influence, suggesting that MSMEs prioritize system usability and efficiency over information accuracy. The study underscores the critical role of satisfaction and decision-making as mediators, reflecting the interplay between system attributes and behavioral outcomes. These findings contribute to the existing body of knowledge by extending models such as the Technology Acceptance Model (TAM) and the DeLone and McLean IS Success Model, particularly in resource-constrained environments. From a practical

perspective, AIS should be designed to align with the operational realities of MSMEs, emphasizing simplicity, reliability, and ease of adoption. Developers should prioritize user-centered designs that enhance accessibility and responsiveness, ensuring that AIS adoption does not become an additional burden for MSME operators. Moreover, policymakers must actively promote digital literacy programs and provide financial incentives, such as subsidized AIS solutions and infrastructure support, to encourage wider adoption. Additionally, this study highlights the importance of regulatory frameworks that ensure data security and privacy for MSMEs adopting cloud-based AIS, addressing one of the primary concerns deterring digital adoption. Future research should explore cultural, organizational, and environmental factors influencing AIS adoption to enhance generalizability. Expanding sample sizes and integrating qualitative approaches can offer deeper insights into user experiences and contextual dynamics, advancing both theoretical and practical understandings of AIS.

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