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Determinants of Accounting Digitalization and Its Impact on Decision-Making Effectiveness in Small and Medium Enterprises in West Java Indonesia

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ABSTRACT: This study investigates the factors determining accounting digitalization adoption and its impact on decision-making effectiveness among small and medium enterprises (SMEs) in West Java, Indonesia. A mixed-method approach was employed, combining quantitative data from 300 SME managers through structured questionnaires with qualitative insights from focus group discussions (FGDs). Structural equation modeling using Smart PLS was utilized for hypothesis testing. System quality, information quality, perceived usefulness, and confirmation significantly influence intention to continue using digital accounting systems, which subsequently enhances management accounting digitalization and decision-making effectiveness through improved accuracy, timeliness, and cost reduction. The findings provide insights for policymakers and technology providers to develop targeted strategies for SME digitalization. This research uniquely integrates technology acceptance and information systems success models in the SME context, validated through mixed-method validation. The study focuses solely on West Java SMEs, limiting generalizability to other regions.

KEYWORDS: Digital Accounting Systems, Information Systems Success, SMEs, Decision Making Effectiveness, Technology Acceptance

I. INTRODUCTION

(The rapid advancement of information technology and internet systems has fundamentally transformed business operations across various sectors, particularly in accounting and financial management. Digital transformation in accounting processes has become increasingly critical for enterprises seeking competitive advantages through improved operational efficiency and enhanced decision-making capabilities (BinSaeed et al., 2023). However, the implementation of accounting digitalization in small and medium enterprises (SMEs) presents unique challenges that require comprehensive investigation.

Indonesia's SME sector, which contributes approximately 61% to the national GDP and employs over 97% of the workforce, represents a critical component of the national economy. Despite the recognized benefits of digital accounting systems, many SMEs in Indonesia, particularly in West Java, struggle with effective implementation and sustained utilization of these technologies. This phenomenon creates a significant gap between the expected benefits of accounting digitalization and the actual outcomes experienced by SME managers.

Previous research has demonstrated that digitalization in accounting can significantly improve operational efficiency through automation of routine tasks, enhance accuracy of financial information, and support strategic decision-making processes (Patra & Rath, 2022). The benefits include reduced manual errors, improved data accessibility, faster reporting cycles, and enhanced analytical capabilities. However, studies have also revealed that many SMEs discontinue or underutilize their digital accounting systems after initial implementation, suggesting a disconnect between expectations and reality.

The theoretical foundation for understanding technology adoption in accounting contexts draws primarily from the Technology Acceptance Model (TAM) and the Information Systems Success Model. Davis (1989) proposed that perceived usefulness and perceived ease of use are primary determinants of technology acceptance. Subsequently, DeLone and McLean's (2003) Information Systems Success Model suggested that system quality, information quality, and user satisfaction collectively influence system usage and net benefits.

Al-Hattami and Almaqtari (2023) extended these models by examining continuance intention in digital accounting systems, emphasizing the role of confirmation between expectations and actual performance. Their study highlighted that satisfaction, perceived usefulness, and confirmation significantly influence users' intention to continue using digital accounting systems.

Similarly, Ratmono et al. (2023) demonstrated that digitalization in management accounting systems mediates the relationship between technology adoption and firm performance in urban SMEs.

Despite these advances, limited research has comprehensively examined the entire chain from adoption determinants to actual implementation in management accounting and subsequent impact on decision-making effectiveness. Furthermore, most existing studies have focused on developed economies or large enterprises, leaving a significant research gap regarding SMEs in developing countries like Indonesia.

This study addresses three critical research questions: First, what factors determine and how do these factors interact to influence SME management's intention to consistently implement accounting digitalization? Second, how does the intention to consistently implement accounting digitalization affect the actual implementation of management accounting digitalization? Third, how does management accounting digitalization influence business decision effectiveness through improved accuracy, timeliness, and cost efficiency?

The research contributes to the existing literature by providing an integrated model that combines technology acceptance factors with implementation outcomes and performance measures specifically in the SME context. The study's focus on West Java provides insights into digitalization challenges and opportunities in one of Indonesia's most economically significant regions.

II. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1 Theoretical Framework

The theoretical foundation of this study integrates three complementary frameworks: the Technology Acceptance Model (TAM), the Information Systems Success Model, and the Expectation-Confirmation Theory. TAM explains initial technology adoption decisions, while the IS Success Model addresses the quality dimensions that determine system effectiveness. The Expectation-Confirmation Theory provides insights into post-adoption behavior and continuance intentions.

2.2 Digital Accounting Systems in SMEs

Digital accounting systems encompass various technologies that automate, streamline, and enhance traditional accounting processes. These systems range from basic bookkeeping software to comprehensive enterprise resource planning (ERP) solutions. For SMEs, digital accounting systems typically include features such as automated transaction recording, real-time financial reporting, inventory management integration, and analytical dashboards.

Jans et al. (2022) conducted a comprehensive review of digitalization in accounting, identifying three primary research streams: information disclosure capabilities, supporting network technologies, and audit and control mechanisms. Their analysis revealed that while large enterprises have successfully implemented comprehensive digital accounting solutions, SMEs face unique challenges related to resource constraints, technical expertise, and organizational readiness.

The benefits of digital accounting systems for SMEs include improved accuracy through automated calculations, enhanced efficiency through streamlined processes, better compliance with regulatory requirements, and improved decision-making through real-time access to financial information. However, successful implementation requires consideration of factors such as system quality, information quality, user training, and organizational support.

2.3 Factors Influencing Continuance Intention

Building on the Expectation-Confirmation Theory, Bhattacherjee (2001) proposed that users' intention to continue using information systems depends on their satisfaction with initial usage and confirmation of expectations. In the context of digital accounting systems, this theory suggests that SME managers' continuance intention depends on how well the system meets their initial expectations.

System Quality refers to the technical characteristics of the digital accounting system, including reliability, ease of use, flexibility, and accessibility. High system quality ensures that users can perform their tasks efficiently without technical difficulties, thereby increasing satisfaction and continuance intention. **Information Quality** encompasses the characteristics of output produced by the digital accounting system, including accuracy, completeness, relevance, and timeliness. Quality information supports effective decision-making and increases user confidence in the system. **Perceived Usefulness** represents the degree to which SME managers believe that using digital accounting systems will enhance their job performance. When users perceive clear benefits from system usage, they are more likely to continue using the technology. **Perceived Ease of Use** reflects the extent to which users believe that using the digital accounting system is free from effort. Systems that are easy to learn and use are more likely to be adopted and continued. **Satisfaction** represents users' overall evaluation of their experience with the digital accounting system. Satisfied users are more likely to continue using the system and recommend it to others. **Confirmation** refers to the congruence between users' expectations and actual system performance. When actual performance meets or exceeds expectations, users experience confirmation, leading to increased satisfaction and continuance intention

H1: System quality positively influences intention to continue using digital accounting systems.

H2: Information quality positively influences intention to continue using digital accounting systems.

H3: Perceived usefulness positively influences intention to continue using digital accounting systems.
H4: Perceived ease of use positively influences intention to continue using digital accounting systems.
H5: Satisfaction positively influences intention to continue using digital accounting systems.
H6: Confirmation positively influences intention to continue using digital accounting systems.

2.4 Impact on Management Accounting Digitalization

The intention to continue using digital accounting systems is expected to translate into actual implementation and utilization in management accounting processes. Management accounting digitalization encompasses the integration of digital tools and technologies in planning, controlling, and decision-making processes.

H7: Intention to continue using digital accounting systems positively influences management accounting digitalization.

2.5 Decision-Making Effectiveness

Management accounting digitalization is expected to improve decision-making effectiveness through three primary mechanisms: enhanced accuracy and timeliness of information, cost reduction, and improved analytical capabilities. **Accuracy and Timeliness** of management accounting information is crucial for effective decision-making. Digital systems can provide real-time access to accurate financial and operational data, enabling managers to make informed decisions quickly. **Cost Reduction** can be achieved through automation of routine accounting tasks, elimination of manual errors, and improved resource allocation. Digital systems can reduce the time and effort required for accounting processes, allowing managers to focus on value-added activities. **Decision-Making Effectiveness** represents the quality and outcomes of managerial decisions. Accurate, timely information and cost-effective processes should ultimately lead to better decision-making

H8: Management accounting digitalization positively influences accuracy and timeliness of information.
H9: Management accounting digitalization positively influences cost reduction.
H10: Accuracy and timeliness positively influence decision-making effectiveness.
H11: Cost reduction positively influences decision-making effectiveness.

The theoretical foundation of this study integrates three complementary frameworks: the Technology Acceptance Model (TAM), the Information Systems Success Model, and the Expectation-Confirmation Theory. TAM explains initial technology adoption decisions, while the IS Success Model addresses the quality dimensions that determine system effectiveness. The Expectation-Confirmation Theory provides insights into post-adoption behavior and continuance intentions.

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III. RESEARCH METHOD (SIZE 10 & BOLD)

3.1 Research Design

This study employed a mixed-method approach, integrating quantitative and qualitative research methodologies to provide comprehensive insights into accounting digitalization among SMEs. The quantitative component utilized structured questionnaires to test the proposed hypotheses, while the qualitative component employed focus group discussions (FGDs) and observations to validate and enrich the quantitative findings.

3.2 Population and Sample

The target population consisted of SMEs in West Java, Indonesia, specifically focusing on enterprises with 20-200 employees and annual revenue between IDR 2.5 billion and IDR 50 billion. According to the Central Statistics Agency (BPS), West Java hosts approximately 4,500 SMEs meeting these criteria across various sectors including manufacturing, trade, and services.

A sample of 300 SME managers and owners was selected using stratified random sampling to ensure representation across different industries and company sizes. The sample size was determined using Krejcie and Morgan's (1970) formula with a 95% confidence level and 5% margin of error. Respondents were required to have at least two years of experience in their current position and direct involvement in accounting and financial decision-making processes.

3.3 Data Collection

Quantitative Data Collection: A structured questionnaire was developed based on validated instruments from previous studies. The questionnaire consisted of 45 items measuring eleven constructs using a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree). Data collection was conducted through both online and offline methods over a period of four months (March-June 2024).

Qualitative Data Collection: Three focus group discussions were conducted with 8-10 participants each, representing different industry sectors and company sizes. FGDs were facilitated using semi-structured discussion guides and lasted approximately 90 minutes each. Additionally, direct observations were conducted at 15 selected SMEs to understand the practical implementation of digital accounting systems.

3.4 Measurement Instruments

All constructs were measured using multi-item scales adapted from established instruments. System Quality and Information Quality were measured using items from Ratmono et al. (2023). Perceived Usefulness and Perceived Ease of Use were adapted from Davis (1989). Satisfaction and Confirmation were measured using Bhattacherjee's (2001) scales. Intention to Continue Using Digital Accounting System was measured using Al-Hattami and Almaqtari's (2023) instrument. Management Accounting Digitalization, Accuracy and Timeliness, Cost Reduction, and Decision-Making Effectiveness scales were developed based on literature review and validated through expert panel review.

3.5 Data Analysis

Quantitative Analysis: Data was analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with Smart PLS 4.0 software. PLS-SEM was chosen due to its suitability for exploratory research and ability to handle complex models with multiple constructs. The analysis followed a two-step approach: first, the measurement model was evaluated for reliability and validity; second, the structural model was assessed for hypothesis testing.

Qualitative Analysis: FGD transcripts were analyzed using thematic analysis with NVivo software. Themes were identified through inductive coding, and findings were used to validate and interpret quantitative results.

Mixed-Method Integration: Quantitative and qualitative findings were integrated at multiple stages of the research process to ensure triangulation and enhance the validity of conclusions.

3.6 Validity and Reliability

Content validity was ensured through extensive literature review and expert panel evaluation. Construct validity was assessed through confirmatory factor analysis. Reliability was evaluated using Cronbach's alpha, composite reliability, and average variance extracted (AVE). Common method bias was assessed using Harman's single-factor test and marker variable technique.

IV. Results and Discussion

4.1 Resultz

4.1.1 Respondent Characteristics and Quantitative Findings

This section presents the comprehensive analysis of data collected from 300 SME respondents in West Java, Indonesia. The results are organized into seven main components: respondent demographics and digital accounting system usage patterns (Tables 1-2), psychometric properties of measurement instruments including reliability and validity assessments (Tables 3-4), structural model evaluation and hypothesis testing outcomes (Tables 5-6), and mediation analysis results (Table 7). These tables collectively demonstrate the robustness of the measurement model and provide empirical support for the proposed theoretical framework linking accounting digitalization determinants to decision-making effectiveness in SMEs.

Table 1. Respondent Demographics (N=300)

Characteristic	Category	Frequency	Percentage
Gender	Male	186	62.0%
	Female	114	38.0%
Age	25-34 years	72	24.0%
	35-50 years	174	58.0%
	51-65 years	54	18.0%
Education	High School	48	16.0%
	Diploma	96	32.0%
	Bachelor's Degree	156	52.0%
Position	Owner	96	32.0%
	Manager	204	68.0%
Business Experience	< 5 years	54	18.0%
	5-15 years	192	64.0%
	> 15 years	54	18.0%
Industry Type	Manufacturing	114	38.0%
	Trading	105	35.0%
	Services	81	27.0%
Company Size	20-50 employees	138	46.0%
	51-100 employees	96	32.0%
	101-200 employees	66	22.0%
Digital Accounting Usage	Yes	234	78.0%
	No	66	22.0%
System Type	Cloud-based	105	45.0%
	Desktop	129	55.0%

Table 2. Digital Accounting System Features Usage (N=234)

Features	Users	Percentage
Basic Bookkeeping	208	89.0%
Financial Reporting	178	76.0%
Inventory Management	122	52.0%
Tax Calculation	164	70.0%
Budget Planning	94	40.0%
Cash Flow Management	145	62.0%
Multi-currency	56	24.0%
Integration with Banks	117	50.0%

Table 3. Construct Reliability and Validity

Construct	Items	Cronbach's α	CR	AVE	√AVE
System Quality (SQ)	4	0.823	0.884	0.656	0.810
Information Quality (IQ)	4	0.856	0.903	0.701	0.837
Satisfaction (S)	3	0.782	0.856	0.612	0.782
Perceived Usefulness (PU)	4	0.834	0.889	0.667	0.817
Perceived Ease of Use (PEU)	4	0.798	0.870	0.629	0.793
Confirmation (CON)	3	0.789	0.878	0.706	0.840
ICU-DAS	4	0.845	0.897	0.687	0.829
DIMAS	5	0.889	0.921	0.743	0.862
Accuracy & Timeliness (AT)	4	0.812	0.876	0.641	0.801
Cost Reduction (CR)	3	0.786	0.873	0.696	0.834
Decision Making Effectiveness (DME)	4	0.831	0.889	0.668	0.817

Note: CR = Composite Reliability; AVE = Average Variance Extracted; ICU-DAS = Intention to Continue Using Digital Accounting System; DIMAS = Digitalization in Management Accounting System.

Table 4. Discriminant Validity - Fornell-Larcker Criterion

	SQ	IQ	S	PU	PEU	CON	ICU	DIMAS	AT	CR	DME
SQ	0.810										
IQ	0.456	0.837									
S	0.523	0.587	0.782								
PU	0.489	0.612	0.634	0.817							
PEU	0.567	0.445	0.498	0.556	0.793						
CON	0.434	0.567	0.645	0.578	0.423	0.840					
ICU	0.498	0.589	0.623	0.678	0.534	0.612	0.829				
DIMAS	0.376	0.445	0.456	0.523	0.389	0.434	0.543	0.862			
AT	0.323	0.389	0.398	0.445	0.334	0.367	0.445	0.612	0.801		
CR	0.287	0.334	0.356	0.398	0.298	0.323	0.389	0.467	0.456	0.834	
DME	0.298	0.356	0.378	0.423	0.312	0.345	0.412	0.534	0.532	0.478	0.817

Note: Bold diagonal values are square roots of AVE

Reliability and Internal Consistency: All constructs demonstrated satisfactory reliability with Cronbach's alpha values ranging from 0.782 to 0.889, and composite reliability values between 0.856 and 0.921, exceeding the recommended threshold of 0.7. Convergent Validity: Factor loadings ranged from 0.708 to 0.892, all exceeding the 0.7 threshold. Average Variance Extracted (AVE) values ranged from 0.612 to 0.743, surpassing the required 0.5 minimum. Discriminant Validity: The Fornell-Larcker criterion and Heterotrait-Monotrait (HTMT) ratio confirmed discriminant validity among all constructs. HTMT values ranged from 0.287 to 0.673, below the conservative threshold of 0.85.

Model Fit: The structural model demonstrated adequate fit with SRMR = 0.058, NFI = 0.832, and RMS_theta = 0.087, indicating acceptable model quality.

Table 5. Hypothesis Testing Results

Hypothesis	Path	Path Coefficient (β)	t-value	p-value	Decision	Effect Size (f^2)
H1	SQ → ICU-DAS	0.184**	3.247	0.003	Supported	0.067
H2	IQ → ICU-DAS	0.219***	4.163	0.000	Supported	0.089
H3	PU → ICU-DAS	0.267***	4.891	0.000	Supported	0.164
H4	PEU → ICU-DAS	0.156**	2.783	0.007	Supported	0.048
H5	S → ICU-DAS	0.198***	3.652	0.001	Supported	0.078
H6	CON → ICU-DAS	0.173**	3.124	0.004	Supported	0.056
H7	ICU-DAS → DIMAS	0.543***	9.876	0.000	Supported	0.418
H8	DIMAS → AT	0.612***	12.347	0.000	Supported	0.595
H9	DIMAS → CR	0.467***	8.234	0.000	Supported	0.279
H10	AT → DME	0.398***	6.721	0.000	Supported	0.186
H11	CR → DME	0.286***	4.892	0.000	Supported	0.096

***Note: **p<0.01, **p<0.001; Effect sizes: small (0.02), medium (0.15), large (0.35)**

Table 6. Model Assessment Summary

Construct	R^2	Adjusted R^2	Q^2	Interpretation
ICU-DAS	0.634	0.627	0.412	Moderate to substantial
DIMAS	0.295	0.292	0.198	Moderate
Accuracy & Timeliness	0.375	0.373	0.234	Moderate
Cost Reduction	0.218	0.216	0.142	Weak to moderate
Decision Making Effectiveness	0.421	0.417	0.267	Moderate

Coefficient of Determination (R^2):
ICU-DAS: $R^2 = 0.634$ (moderate to substantial)
DIMAS: $R^2 = 0.295$ (moderate)
Accuracy & Timeliness: $R^2 = 0.375$ (moderate)
Cost Reduction: $R^2 = 0.218$ (weak to moderate)
Decision Making Effectiveness: $R^2 = 0.421$ (moderate)
Effect Sizes (f^2): Most relationships demonstrated medium to large effect sizes, with Perceived Usefulness showing the largest effect on ICU-DAS ($f^2 = 0.164$).
Predictive Relevance (Q^2): All endogenous constructs showed positive Q^2 values, indicating predictive relevance of the model.
The study tested the mediating role of Management Accounting Digitalization (DIMAS) in the relationship between Intention to Continue Using Digital Accounting Systems (ICU-DAS) and decision-making effectiveness through accuracy & timeliness and cost reduction.

Table 7. Mediation Analysis Results

Mediation Path	Direct Effect	Indirect Effect	Total Effect	VAF*	Mediation Type
ICU-DAS → DIMAS → AT → DME	-	0.132*** (5.234)	0.132***	-	Full Mediation
ICU-DAS → DIMAS → CR → DME	-	0.071*** (3.876)	0.071***	-	Full Mediation
ICU-DAS → AT → DME	0.089* (2.156)	0.132*** (5.234)	0.221***	59.7%	Partial Mediation
ICU-DAS → CR → DME	0.063 (1.789)	0.071*** (3.876)	0.134***	53.0%	Full Mediation

Note: t-values in parentheses; *p<0.05, ***p<0.001; VAF = Variance Accounted For

Indirect Effects:
ICU-DAS → DIMAS → Accuracy & Timeliness → DME: $\beta = 0.132$, $t = 5.234$, $p < 0.001$
ICU-DAS → DIMAS → Cost Reduction → DME: $\beta = 0.071$, $t = 3.876$, $p < 0.001$
The results confirm that DIMAS significantly mediates the relationship between continuance intention and decision-making effectiveness.

4.1.2 Qualitative Findings

The qualitative findings from focus group discussions provided rich insights that both complemented and validated the quantitative results, revealing nuanced perspectives on digital accounting system adoption among SMEs. Participants consistently identified

implementation challenges as a critical factor affecting system success, with lack of technical expertise, insufficient training, and organizational resistance to change emerging as the most significant barriers. As one participant candidly observed, "We bought the software, but our staff struggled to use it effectively because we didn't have proper training," highlighting the gap between technology acquisition and effective utilization that many SMEs experience during digital transformation initiatives.

A recurring theme throughout the discussions was the substantial expectation-reality gap that SMEs encountered during implementation phases. Many participants expressed considerable frustration with the disconnect between vendor promises and actual system performance, particularly during initial deployment periods. This sentiment was captured by a manufacturing SME owner who stated, "The system was supposed to make everything easier, but initially, it created more work because we had to learn new processes." This finding suggests that SMEs often underestimate the learning curve and temporary productivity disruptions associated with digital system implementation, leading to early adoption challenges that can impact long-term success rates.

However, the focus groups also revealed clear patterns among successful implementations, with participants identifying several critical success factors that differentiated positive outcomes from problematic deployments. Strong management support emerged as a foundational element, coupled with comprehensive training programs and gradual, phased implementation approaches that allowed organizations to adapt systematically to new processes. A trading company manager exemplified this approach, explaining, "We took our time to train everyone properly and implemented the system step by step, which made a huge difference." This finding underscores the importance of strategic planning and organizational commitment in digital transformation success.

Perhaps most significantly, participants who had successfully navigated the implementation process reported substantial improvements in their decision-making capabilities, demonstrating the ultimate value proposition of digital accounting systems. These SMEs experienced enhanced decision-making speed and quality through improved data accessibility and real-time reporting capabilities. As articulated by one service company manager, "Now I can get real-time reports and make decisions quickly based on accurate data," this transformation represents the core benefit that drives digital adoption—the ability to make informed, timely business decisions based on accurate, readily available financial information. These qualitative insights collectively paint a picture of digital accounting adoption as a complex process requiring careful planning, adequate resources, and organizational commitment, but ultimately delivering significant value to SMEs that successfully navigate the implementation challenges.

4.1.3 Multi-Group Analysis

Multi-group analysis was conducted to examine differences in path coefficients across distinct organizational characteristics, including company size (small vs. medium), industry type (manufacturing vs. trading vs. services), and technology experience levels (low vs. high), as presented in Tables 8 and 9. Research demonstrates that factors influencing continuance intention to use digital accounting systems can vary significantly based on different organizational characteristics (Al-Hattami et al., 2023). The multi-group analysis results reveal significant variations in relationship strengths across different segments, with group differences analysis confirming that medium-sized enterprises, manufacturing companies, and organizations with higher technology experience demonstrate significantly stronger path coefficients on specific relationships, indicating the importance of context-specific implementation strategies for different SME categories.

Table 8. Multi-Group Analysis Results

Path	**Company Size**		**Industry Type**			**Technology Experience**	
	Small (n=138)	Medium (n=162)	Manufacturing (n=114)	Trading (n=105)	Services (n=81)	Low (n=145)	High (n=155)
SQ → ICU-DAS	0.147*	0.234**	0.189*	0.176*	0.192*	0.165*	0.201**
IQ → ICU-DAS	0.198**	0.241***	0.225**	0.214**	0.219**	0.189*	0.248***
PU → ICU-DAS	0.245***	0.289***	0.278***	0.256***	0.267***	0.234**	0.299***
PEU → ICU-DAS	0.134*	0.178*	0.145*	0.162*	0.159*	0.089	0.198**
S → ICU-DAS	0.185*	0.212**	0.201*	0.195*	0.198*	0.176*	0.220**
CON → ICU-DAS	0.156*	0.191*	0.168*	0.175*	0.177*	0.145*	0.201**
DIMAS → AT	0.589***	0.635***	0.624***	0.601***	0.611***	0.578***	0.645***

DIMAS → CR	0.445***	0.489***	0.512***	0.421***	0.468***	0.434***	0.501***
AT → DME	0.378***	0.418***	0.387***	0.409***	0.398***	0.365***	0.431***
CR → DME	0.267**	0.305***	0.342***	0.198*	0.289**	0.254**	0.318***

Note: *p<0.05, **p<0.01, ***p<0.001

Table 9. Group Differences (Path Coefficient Differences)

Moderator	Path	Difference	t-value	Significance
Company Size	SQ → ICU-DAS	0.087	2.156*	Yes
	PU → ICU-DAS	0.044	1.234	No
Industry Type	CR → DME (Mfg vs Trade)	0.144	2.789**	Yes
	CR → DME (Mfg vs Service)	0.053	1.156	No
Tech Experience	PEU → ICU-DAS	0.109	2.456**	Yes
	IQ → ICU-DAS	0.059	1.789	No

The multi-group analysis revealed distinct patterns across organizational characteristics, highlighting the contextual nature of digital accounting system adoption. **Company size** emerged as a significant moderator, with medium-sized enterprises demonstrating stronger relationships between system quality and continuance intention (β = 0.234) compared to small enterprises (β = 0.147), suggesting that larger SMEs possess greater technical sophistication and are more sensitive to system performance characteristics. **Industry type** variations showed manufacturing companies exhibiting significantly stronger associations between cost reduction and decision-making effectiveness (β = 0.342) than trading companies (β = 0.198), reflecting the manufacturing sector's inherent focus on operational efficiency and cost optimization imperatives. **Technology experience** proved to be a critical differentiator, with high-experience companies showing substantially stronger relationships between perceived ease of use and continuance intention (β = 0.198) versus low-experience counterparts (β = 0.089), indicating that technologically mature organizations are better positioned to recognize and value user-friendly system interfaces. These findings align with research demonstrating that organizational characteristics significantly influence digital accounting system adoption patterns and success factors (Lutfi et al., 2022; Al-Hattami et al., 2023). These contextual differences underscore the necessity for tailored implementation strategies that account for organizational size, industry requirements, and technological readiness when deploying digital accounting systems across diverse SME segments.

4.2 Discussion

4.2.1 Theoretical Contributions

This study makes several important theoretical contributions to the literature on digital accounting systems and SME technology adoption. First, the research successfully integrates the Technology Acceptance Model with the Information Systems Success Model and Expectation-Confirmation Theory, providing a comprehensive framework for understanding both adoption decisions and post-adoption behavior in the SME context. This integration extends beyond traditional TAM applications by incorporating the multidimensional nature of system success, as TAM typically accounts for 40-60% of variance in technology acceptance while IS Success Model provides additional dimensions of information quality, system quality, and net benefits (Venkatesh & Davis, 2000; Silva et al., 2022). The findings demonstrate that all six proposed antecedents significantly influence intention to continue using digital accounting systems, with perceived usefulness emerging as the strongest predictor. This result aligns with previous research emphasizing the importance of clear value proposition in technology adoption decisions among SMEs, where resource constraints make benefit perception critical, and confirms the consistent finding that perceived usefulness remains the strongest predictor across various technology contexts (Inayatulloh et al., 2021; Alzaabi & Omar, 2021). Recent studies in accounting technology adoption demonstrate that perceived usefulness, social status, and perceived enjoyment significantly influence behavioral intention, while perceived ease of use effects vary by context and user experience (Gonidakis, 2025).

Second, the study provides empirical evidence for the mediating role of management accounting digitalization in translating continuance intention into tangible business outcomes, extending the theoretical understanding of the intention-behavior gap in SME technology adoption. The strong relationship between continuance intention and actual implementation (β = 0.543) suggests that behavioral intention is indeed a reliable predictor of actual behavior in the SME context, supporting the theoretical foundations of TAM. This finding contributes to the ongoing discourse in IS success literature, where the DeLone and McLean model emphasizes the temporal and causal interdependencies between system use, user satisfaction, and net benefits (DeLone & McLean, 2003; Tam

& Oliveira, 2020). Third, the research extends existing knowledge by demonstrating the dual pathway through which management accounting digitalization influences decision-making effectiveness. The findings show that both accuracy & timeliness (β = 0.398) and cost reduction (β = 0.286) serve as significant mediators, with information quality showing stronger impact than cost considerations, aligning with recent applications of the DeLone and McLean IS Success Model where information quality consistently emerges as a critical predictor of system success (Fadelelmoula, 2023; Al-Mamary, 2023). This dual mediation mechanism contributes to management accounting literature by empirically validating that digitalization in management accounting systems enhances decision-making through both improved information quality and operational cost efficiency (Al-Hattami et al., 2023). The study's comprehensive framework thus advances theoretical understanding by demonstrating how technology acceptance constructs, system success dimensions, and organizational outcomes interact in the specific context of SME digital accounting adoption, providing a nuanced model that captures the complexity of digital transformation in resource-constrained environments.

4.2.2 Practical Implications

The study's findings offer valuable practical implications for key stakeholders involved in SME digital accounting system adoption, providing evidence-based guidance for implementation, product development, and policy formulation. **For SME Managers**, the findings provide clear guidance for organizations considering or struggling with digital accounting system implementation. Recent policy initiatives emphasize that SMEs must prioritize setting realistic expectations and ensuring proper confirmation between expected and actual system performance, as government support has become increasingly critical through financial aid, training programs, and strategic guidance to facilitate digital adoption (UK SME Digital Adoption Taskforce, 2025; Pereira et al., 2024). The study emphasizes the importance of perceived usefulness and information quality as primary success factors, aligning with evidence that successful digital transformation requires viewing technology as integral to overall business strategy rather than isolated technical implementation. The qualitative findings highlight the critical importance of comprehensive training and gradual implementation approaches, as research demonstrates that SMEs often approach digitalization incrementally and pragmatically due to resource constraints (Meechang et al., 2025; Johnson et al., 2025). SMEs should invest adequate resources in user training and change management to bridge the expectation-reality gap that often leads to system abandonment, particularly as successful implementations require strong leadership commitment, workforce upskilling, and supportive organizational ecosystems.

For Technology Vendors, the results suggest fundamental shifts in product development and marketing strategies to better serve SME markets. Leading providers must communicate holistic value propositions by emphasizing superior performance, technical reliability, and responsive customer service, while maintaining constant dialogue with SMBs to understand their evolving needs and provide distinctive user experiences (McKinsey, 2023; Sudirman et al., 2025). The strong influence of perceived usefulness indicates that vendors should clearly communicate tangible benefits and provide concrete examples of how their systems improve business performance, moving beyond technical specifications to demonstrate real-world impact. The multi-group analysis results suggest that vendors should develop differentiated approaches for different SME segments, as research shows that SMEs differ markedly from large enterprises in their approach to digital transformation due to resource constraints and varying technological capabilities (Johnson et al., 2025; Trabert et al., 2023). Medium-sized enterprises may require more sophisticated technical features and advanced analytics capabilities, while smaller enterprises may prioritize ease of use, simplicity, and cost-effectiveness in their technology selection processes.

For Policymakers, the findings provide crucial insights for government agencies and industry associations developing SME digitalization programs. Policy interventions should focus on addressing key barriers including low awareness, insufficient internal resources, skill deficiencies, and financial limitations, with OECD recommendations emphasizing the need for encouraging digital uptake, supporting SME training and upskilling, strengthening management skills, and leveraging financial technology (OECD, 2024). The research suggests that successful digitalization requires a holistic approach that goes beyond technology provision to include training, support, and change management assistance, as demonstrated by comprehensive national programs like Spain's SME Digitalization Plan 2021-2025 and APEC's collaborative frameworks (España Digital 2026; APEC, 2020). Government programs should consider these multifaceted factors in their design and implementation, recognizing that policy measures and financial incentives serve as key determinants for successful digital adoption, particularly in post-pandemic recovery efforts where SMEs require external structural support to overcome persistent challenges (Pereira et al., 2024; Al-Somali et al., 2024). The evidence suggests that effective policy frameworks must integrate technology provision with comprehensive support systems that address organizational, human resource, and change management dimensions of digital transformation.

4.2.3 Limitations and Future Research

Several limitations should be acknowledged. First, the study focuses exclusively on SMEs in West Java, limiting the generalizability of findings to other regions or countries with different economic and cultural contexts. Future research should examine the model's applicability in different geographical and cultural settings.

Second, the cross-sectional design limits the ability to establish causality and examine the temporal dynamics of digital accounting system adoption and implementation. Longitudinal studies would provide valuable insights into how relationships evolve over time and how initial adoption decisions translate into long-term usage patterns.

Third, the study focuses on existing users of digital accounting systems, potentially creating selection bias. Future research should include non-adopters to provide a more complete picture of the digitalization landscape among SMEs.

Fourth, while the study includes qualitative validation through FGDs, the sample size for qualitative data was relatively small. Future research could benefit from more extensive qualitative investigation, including in-depth case studies of successful and unsuccessful implementations.

4.2.4 Future Research Directions

Several promising avenues for future research emerge from this study.

First, researchers should investigate the role of external factors such as competitive pressure, regulatory requirements, and supply chain digitalization in influencing SME adoption decisions.

Second, the study's focus on decision-making effectiveness could be extended to examine specific types of decisions and their outcomes. Future research could investigate how digital accounting systems influence different categories of managerial decisions, such as pricing, investment, and operational decisions.

Third, the dynamic nature of technology adoption suggests the need for longitudinal studies that track SMEs through their digitalization journey, from initial consideration to sustained implementation and potential system upgrades or replacements.

Finally, comparative studies examining differences between SMEs in developed and developing countries could provide insights into the role of institutional and economic factors in shaping digitalization outcomes.

CONCLUSIONS

This study provides comprehensive insights into the determinants of accounting digitalization and its impact on decision-making effectiveness among SMEs in West Java. The findings demonstrate that system quality, information quality, perceived usefulness, perceived ease of use, satisfaction, and confirmation all significantly influence intention to continue using digital accounting systems.

The research establishes clear linkages between continuance intention, management accounting digitalization, and decision-making effectiveness through improved accuracy, timeliness, and cost reduction. These findings contribute to both theoretical understanding and practical guidance for SMEs, technology vendors, and policymakers involved in SME digitalization initiatives.

The mixed-method approach provides robust validation of the quantitative findings and offers rich insights into the practical challenges and success factors in SME digitalization. The study's integrated theoretical framework offers a foundation for future research in this important and rapidly evolving field. The implications extend beyond accounting digitalization to broader questions of technology adoption and implementation in resource-constrained environments. As SMEs worldwide grapple with digital transformation pressures, the insights from this study provide valuable guidance for achieving successful and sustainable digitalization outcomes

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