

An Information Systems Model for Cloud-Based Accounting Adoption and MSME Financial Reporting Compliance

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Abstract—This study proposed an information systems model to investigate the relationships among cloud-based accounting adoption, financial reporting compliance, and reporting quality in Indonesian micro, small, and medium enterprises (MSMEs). A total of 320 records were collected and processed through data cleaning, coding, normalization, and indicator standardization before being operationalized into latent constructs based on expert-defined measures. Partial Least Squares Structural Equation Modeling (PLS-SEM) using SmartPLS 4.0 was employed in the analysis. The measurement model demonstrated adequate reliability and convergent validity, satisfying recommended thresholds for Cronbach's Alpha, Composite Reliability, and Average Variance Extracted, while the structural model showed acceptable explanatory power. The results reveal that compliance with standards positively influences financial reporting quality ($\beta = 0.32$). Cloud-based accounting adoption also significantly mediates and strengthens this relationship ($\beta = 0.45$). MSMEs combining regulatory compliance with cloud accounting achieved the highest reporting quality. These findings extend the information systems literature by demonstrating the enabling role of cloud accounting in transforming compliance into improved reporting outcomes, while offering practical implications for policymakers, MSME support agencies, and software developers seeking to enhance financial accountability and digital transformation.

Index Terms—Information systems model, cloud-based accounting adoption, financial reporting compliance, digital financial transformation.

I. INTRODUCTION

Micro, small, and medium enterprises (MSMEs) are widely recognized as key drivers of inclusive economic growth, particularly in emerging economies such as Indonesia [1]. MSMEs contribute substantially to employment creation and gross domestic product; however, many still experience persistent weaknesses in financial reporting practices. These weaknesses reduce financial transparency, limit access to external financing, and weaken business accountability [1], [2]. In this context, improving the quality of MSME financial reporting requires not only regulatory support but also effective information systems that can translate compliance requirements into practical reporting processes.

To address these challenges, Indonesia introduced the To address these challenges, Indonesia introduced the Financial Accounting Standards for Micro, Small, and Medium-Sized Entities (SAK EMKM), a simplified financial reporting standard designed specifically for MSMEs [2], [3]. SAK EMKM aims to improve the quality, comparability, and credibility of MSME financial statements for stakeholders, including lenders, regulators, and business partners [4]–[6]. Nevertheless, its implementation remains uneven across Indonesia. Previous studies indicate that low awareness among business owners, limited accounting competence, insufficient digital literacy, and weak technological infrastructure continue to hinder effective compliance [7], [8]. These barriers suggest that compliance with simplified standards cannot be achieved solely through regulatory availability, but requires supporting digital systems that are accessible, usable, and aligned with MSME operational capabilities.

Cloud-based accounting platforms offer a promising information systems solution for overcoming these constraints. By providing automated bookkeeping, real-time reporting, tax and invoicing integration, and user-friendly interfaces, cloud accounting systems can simplify financial administration and support more consistent compliance with national reporting standards [9], [10]. From an information systems perspective, cloud accounting is not merely a digital accounting tool, but an enabling infrastructure that connects regulatory requirements

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with day-to-day business processes. For resource-constrained MSMEs, such systems may reduce technical complexity, improve reporting discipline, and enhance the accuracy and timeliness of financial information [11].

Despite the growing body of literature on MSME financial reporting and cloud accounting adoption, previous studies have largely examined these domains independently [9]. Research on SAK EMKM has primarily focused on regulatory compliance and the quality of financial statements. In contrast, studies on cloud accounting have predominantly emphasized technology adoption, usability, and organizational readiness based on frameworks such as the technology acceptance model (TAM). Consequently, limited attention has been paid to understanding how regulatory compliance and cloud-based accounting systems interact as complementary mechanisms to improve financial reporting quality. Moreover, prior studies have rarely examined whether cloud accounting serves as an enabling information system that mediates the relationship between compliance with accounting standards and reporting outcomes [8]. This fragmented perspective leaves an important theoretical and practical gap in explaining how digital accounting technologies can strengthen compliance implementation and enhance the quality of MSME financial reporting. To address this gap, the present study proposes and empirically validates an integrated information systems model that combines Institutional Theory and TAM to examine the mediating role of cloud-based accounting adoption in linking SAK EMKM compliance to financial reporting quality among Indonesian MSMEs [12], [13].

This study addresses this gap by developing and testing an information systems model for cloud-based accounting adoption and MSME financial reporting compliance. Specifically, the study examines whether compliance with SAK EMKM directly improves financial reporting quality and whether cloud-based accounting adoption strengthens this relationship as a mediating mechanism. Using a quantitative explanatory approach and PLS-SEM, this research provides empirical evidence on the dual role of regulatory compliance and digital accounting systems in enhancing MSME reporting outcomes. The novelty of this study lies in positioning cloud accounting as an information systems enabler that transforms simplified reporting standards into operationally usable, measurable, and scalable financial reporting practices. The findings are expected to contribute to the information systems literature on digital adoption and organizational compliance, while also offering practical implications for policymakers, MSME educators, fintech providers, and software developers seeking to strengthen financial accountability and digital transformation in the MSME sector.

II. RELATED WORK

A growing body of research has examined financial reporting standards, cloud accounting adoption, and digital transformation within the MSME sector. Then, [2] for instance, investigated the implementation of SAK EMKM via the LAMIKRO application and demonstrated that digital tools can

simplify financial reporting for small businesses [2]. However, their study was limited to a single MSME case and did not provide broader empirical evidence regarding adoption patterns or reporting quality outcomes. Similarly, [1] discussed several barriers to SAK EMKM implementation, including limited digital literacy, insufficient socialization, and weak human-resource competence [1]. Although these findings are useful for understanding compliance challenges, the analysis remains largely descriptive and does not explain how digital information systems can support the practical implementation of accounting standards.

Other studies have focused more directly on cloud accounting and technology adoption. Study [9] developed a technology acceptance model-based framework to examine cloud accounting adoption among Indonesian MSMEs. Their findings confirmed the importance of technological readiness, perceived usefulness, and ease of use in shaping adoption behavior [9]. However, the study did not incorporate the regulatory dimension, particularly the alignment between cloud accounting adoption and national financial reporting standards such as SAK EMKM. Reference [10] also emphasized the potential of cloud accounting applications to improve MSME financial efficiency. However, their work did not provide an empirical model linking cloud-based accounting systems to financial reporting compliance or reporting quality [10]. In the same vein, other study highlighted the role of cloud-based accounting information systems in supporting digital transformation. However, the interaction between accounting standards, digital adoption, and measurable reporting outcomes remains insufficiently examined [11].

From an information systems perspective, these prior studies show that financial reporting compliance and cloud accounting adoption have often been treated as separate research domains. Studies on SAK EMKM tend to emphasize institutional compliance, regulatory awareness, and accounting capability, while studies on cloud accounting focus mainly on technological readiness, perceived usefulness, system compatibility, and adoption intention. This separation limits the development of an integrated model that can explain how digital accounting systems function as an enabling mechanism for regulatory compliance. In practice, MSMEs may be aware of financial reporting standards but still fail to implement them effectively without appropriate digital systems. Conversely, cloud accounting adoption may improve operational efficiency but may not necessarily enhance reporting quality unless it is aligned with applicable regulatory standards.

Methodologically, previous research has also relied heavily on qualitative case studies, descriptive surveys, or general technology adoption frameworks. Such approaches provide useful contextual insights but offer limited statistical evidence regarding the combined effect of regulatory compliance and digital accounting adoption on MSME financial reporting quality. Moreover, few studies have explicitly tested the mediating role of cloud-based accounting systems in transforming simplified financial reporting standards into improved reporting outcomes. This methodological limitation

creates an important gap in the information systems literature, particularly in understanding how information technology adoption can strengthen organizational compliance and performance in resource-constrained MSMEs.

Therefore, this study addresses these gaps by developing an integrated information systems model that combines regulatory and technological perspectives. Specifically, it examines how SAK EMKM compliance influences financial reporting quality, both directly and indirectly through the adoption of cloud-based accounting. By employing secondary national datasets, industry-based indicators, and partial least squares structural equation modeling, this study offers a scalable empirical framework for evaluating the relationship between financial reporting compliance, cloud accounting adoption, and reporting quality. The contribution of this study lies in positioning cloud-based accounting not merely as an accounting application, but as an information systems enabler that bridges institutional requirements and operational reporting practices in MSMEs.

III. RESEARCH METHOD

Understanding the dynamics of financial reporting quality in MSMEs requires not only identifying technical constraints but also developing an empirical model that captures the interaction between regulatory compliance and technological adaptation [12]–[14]. Given the dual influence of institutional regulation (SAK EMKM) and digital innovation (cloud-based accounting), this study moves beyond descriptive analysis by constructing a statistically testable framework grounded in theory and validated with secondary data.

This study examines how integrating SAK EMKM compliance with the adoption of cloud-based accounting platforms influences the quality of financial reporting among Indonesian micro, small, and medium-sized enterprises (MSMEs). While previous studies have tended to isolate either regulatory or technological factors, this research adopts a dual-dimensional perspective, viewing cloud accounting not simply as a digital tool but as a strategic mediator that channels the effects of accounting compliance into measurable improvements in reporting outcomes [15]–[17].

The framework is theoretically anchored in Institutional Theory and the TAM, which serve as conceptual justifications for the relationships modeled. Institutional Theory explains how formalized regulations such as SAK EMKM exert external pressure that shapes organizational behavior and structure [18]. Meanwhile, TAM provides a foundation for understanding how MSMEs adopt digital solutions based on factors such as perceived usefulness and technological readiness [19]. Although these theories are not tested as constructs in the model, they inform the hypothesized pathways presented in this research. Institutional Theory explains the exogenous pressure to comply with SAK EMKM, while TAM justifies the mediating role of perceived usefulness in cloud tool adoption.

This study adopts a quantitative explanatory design, using secondary data collected from public databases, such as Statistics Indonesia (BPS), or Directorate General of Taxation (DJP), fintech reports such as Indonesia Financial Services Authority (OJK) and Indonesia Fintech Association (AFTECH), and industry whitepapers. A total of 320 MSME financial records were extracted from the 2022 BPS dataset and filtered to ensure the availability of complete income statements and balance sheets. The unit of analysis comprises MSMEs operating in the service and manufacturing sectors, with data collected for the 2022–2024 reporting periods. Convergent validity was assessed using Average Variance Extracted (AVE), and discriminant validity using Fornell-Larcker criteria.

To operationalize the model, three primary latent variables are defined: (1) SAK EMKM compliance, (2) Cloud-based accounting adoption, and (3) Financial reporting quality. Compliance is measured by adherence to simplified standards, including asset classification, equity structure, and financial disclosures. Cloud accounting adoption is assessed based on core digital accounting features, such as automated ledgers, invoicing, and tax calculation tools. Reporting quality is evaluated using indicators of accuracy, submission punctuality, and audit readiness. Each indicator was selected based on its theoretical relevance and previous empirical validation. For example, asset classification was chosen as a primary indicator of SAK EMKM compliance, and the use of automated bookkeeping was used to assess cloud accounting adoption.

The analytical approach employs PLS-SEM using SmartPLS 4.0 [20], [21]. PLS-SEM is selected for its ability to estimate complex models with mediating effects and relatively small sample sizes [22], [23]. Bootstrapping with 5,000 subsamples is conducted to assess the significance and stability of the structural paths. Convergent validity was assessed using AVE, and discriminant validity using Fornell-Larcker criteria.

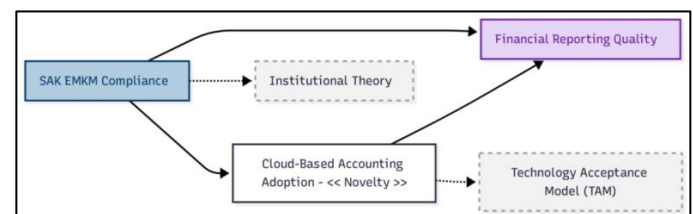


Fig. 1. The Proposed Information Systems Research Framework

As illustrated in Fig. 1, the model posits that SAK EMKM compliance directly affects financial reporting quality and indirectly through the mediating role of cloud-based accounting adoption. This mediation pathway represents the study's core novelty. The diagram further highlights the theoretical scaffolding behind each relationship: Institutional Theory underpins the effect of regulatory compliance, while TAM supports the modeling of technology adoption behaviors. This framework captures the central argument that formal accounting standards, while essential, may fall short without enabling technologies that facilitate real-time implementation

and usage. Especially in the MSME sector, where resource constraints and limited financial literacy persist, digital platforms may serve as crucial enablers, translating regulatory intentions into practical outcomes. In summary, the methodological contribution of this study lies in its theory-informed and empirically tested model that bridges the divide between regulatory design and technological execution. It is designed to provide actionable insights for regulators, policymakers, and fintech providers working to improve financial transparency and governance among MSMEs.

Table 1.
Operationalization of SAK EMKM Compliance and Cloud-Based Accounting

Variable	Indicators	Measurement Scale	Source
SAK EMKM compliance	Asset classification according to SAK EMKM format	Ordinal	[2]
	Equity structure in line with simplified reporting	Ordinal	[1]
	Presentation of income statement (single-step format)	Ordinal	[11]
	Availability of financial notes/disclosures	Ordinal	[8]
Cloud-based accounting	Use of automated bookkeeping modules	Likert (1–5)	[24]
	Integration with tax & invoicing tools	Likert (1–5)	[10]
	Frequency of usage (daily/weekly/monthly)	Ordinal	[9]
	Perceived ease of use	Likert (1–5)	[19]

Table 2.
Operationalization of Financial Reporting Quality

Variable	Indicators	Measurement Scale	Source
Financial reporting quality	Timeliness of financial statement submission	Likert (1–5)	[1]
	Accuracy of financial data entries	Interval	[11]
	Compliance with tax and audit requirements	Ordinal	[25]
	Absence of anomalies (e.g., unbalanced reports)	Ordinal	[8]

Table 3.
Supporting Indicators Based on TAM

TAM Construct	Indicators	Measurement Scale	Source
Perceived usefulness	Cloud tools improve reporting efficiency	Likert (1–5)	[9]
	Real-time reports improve decision-making.	Likert (1–5)	[10], [11]
Ease of use	Ease of using ledgers and invoicing	Likert (1–5)	[19]
Tech readiness	Internet/IT readiness in MSMEs	Likert (1–5)	[9], [19]

The indicators presented in Table 1 reflect the operational definitions of the independent variable (SAK EMKM compliance) and the mediating variable (cloud-based accounting adoption) and are aligned with the research framework. Each item is derived from previous empirical studies and industry benchmarks, ensuring both theoretical validity and practical relevance. The measurement scales have been selected to enable robust estimation in the PLS-SEM

model, particularly to capture variability in regulatory compliance and the degree of digital adoption among MSMEs.

Table 2 outlines the indicators used to measure the dependent variable, namely financial reporting quality. The constructs are adapted from national and international best practices in SME reporting, with emphasis on timeliness, accuracy, and audit compliance. These dimensions are critical to evaluating whether regulatory and technological interventions effectively improve transparency and financial discipline within the MSME sector.

Although the constructs based on TAM are not directly estimated in the structural model, Table 3 provides supporting indicators that conceptually justify the inclusion of cloud-based accounting adoption as a mediating variable. These constructs perceived usefulness, ease of use, and technological readiness have been widely validated in digital adoption research and offer an interpretive basis for understanding how and why MSMEs integrate cloud technologies into their financial practices.

IV. RESULTS AND DISCUSSION

A. Results

This section presents the findings of the PLS-SEM analysis, which was used to evaluate the relationships hypothesized in the research framework. As described in the methodology, three latent constructs were modeled: (1) SAK EMKM compliance, (2) Cloud-based accounting adoption, and (3) Financial reporting quality. Figure 2 visualizes the structural path coefficients derived from the SmartPLS 4.0 analysis. Each coefficient represents the strength and direction of the causal relationship between the constructs.

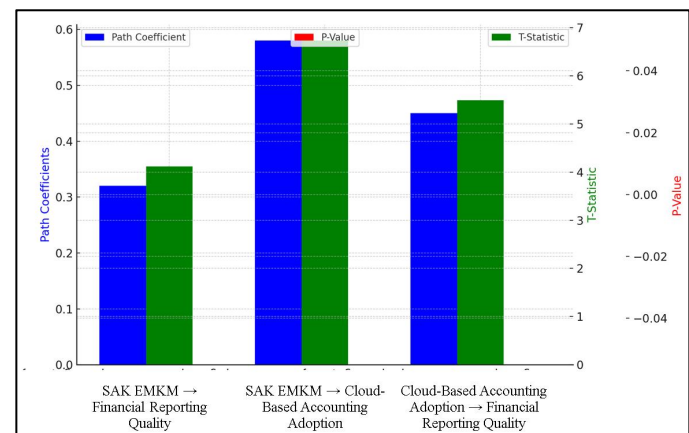


Fig. 2. Structural path coefficients of the PLS-SEM model.

Table 4.
Structural Path Coefficients and Significance Levels

Pathway	Path Coefficient	T-Statistic	P-Value
SAK EMKM compliance → Financial reporting quality	0.32	4.12	0.000
SAK EMKM compliance → Cloud-based accounting adoption	0.58	6.73	0.000
Cloud-based accounting Adoption → Financial reporting quality	0.45	5.49	0.000

Figure 2 (referring to Table 4) illustrates the structural relationships among the three primary latent constructs in the model: SAK EMKM Compliance, Cloud-Based Accounting Adoption, and Financial Reporting Quality, based on the results of the PLS-SEM analysis. As shown in the figure and corroborated by Table 4, the path coefficient from SAK EMKM compliance to financial reporting quality is 0.32 with a t-statistic of 4.12 and a p-value of 0.000, indicating a statistically significant direct effect. This supports the premise that regulatory compliance contributes to improved reporting transparency and standardization among MSMEs.

More notably, the pathway from SAK EMKM compliance to cloud-based accounting adoption has the highest path coefficient, 0.58, with a t-statistic of 6.73, which is also highly significant ($p = 0.000$). This suggests that adherence to regulatory standards drives MSMEs to seek digital tools that simplify and automate compliance, confirming the institutional pressure mechanisms outlined in Institutional Theory. The third pathway, from cloud-based accounting adoption to financial reporting quality, yields a path coefficient of 0.45 with a t-statistic of 5.49 ($p = 0.000$), further highlighting the critical role of digital accounting technologies in enhancing the accuracy, accessibility, and timeliness of financial information.

Collectively, these results provide empirical validation of the proposed mediated relationship, in which cloud-based accounting systems serve as an enabling mechanism through which regulatory compliance exerts a stronger effect on reporting quality. The relatively higher indirect impact (SAK EMKM $\rightarrow$ cloud accounting $\rightarrow$ reporting quality) supports the study's central novelty: that integration of regulation and technology yields superior outcomes compared to either component alone.

To assess the validity of the constructs in the proposed model, indicator loadings were analyzed using PLS-SEM. Indicator loadings reflect the strength of the relationship between each observed variable and its corresponding latent construct. Values above 0.70 are generally considered acceptable, indicating that the indicators strongly represent the constructs they measure. The analysis revealed that all indicators meet this threshold, suggesting robust measurement properties for the constructs in the model. Figure 3 presents the indicator loadings for each construct included in the PLS-SEM model. These loadings demonstrate the relative importance of each indicator in measuring the latent constructs of SAK EMKM compliance, cloud-based accounting adoption, and financial reporting quality.

As shown in Figure 3, the highest loading value is observed for auto bookkeeping use (0.84), emphasizing its central role in cloud-based accounting adoption. This suggests that MSMEs that use automated accounting tools are more likely to adopt cloud-based systems, which, in turn, improve the quality of their financial reporting. Other significant indicators include tax integration (0.79) and ease of use (0.81), which highlight key aspects that facilitate the adoption of cloud accounting systems.

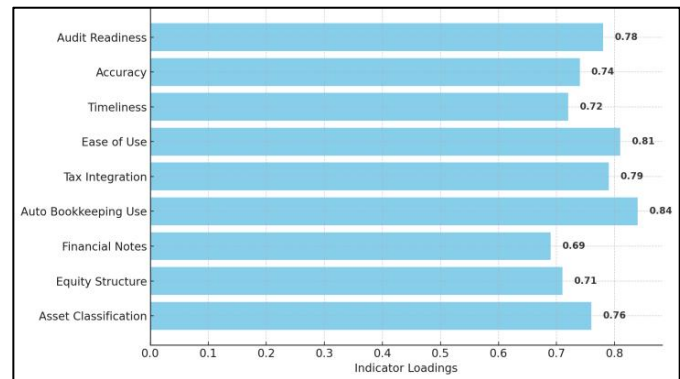


Fig. 3. Indicator loadings per construct.

On the other hand, asset classification (0.76) is the strongest indicator for SAK EMKM Compliance, underscoring its importance in ensuring proper financial reporting for MSMEs. The relatively high loadings for other indicators, such as equity structure (0.71) and financial notes (0.69), further confirm the comprehensive nature of the regulatory compliance framework and its influence on overall financial reporting quality. These results underscore the strong measurement properties of the constructs and provide empirical support for the integrated model, demonstrating that both regulatory compliance and digital accounting tools significantly enhance financial reporting quality in MSMEs.

To validate the measurement model and assess the reliability of each construct, the indicator loadings were analyzed. Indicator loadings provide insights into how well each observed variable represents its corresponding latent construct. According to [22], an indicator loading above 0.60 is generally considered acceptable for inclusion in the model, ensuring that the indicator sufficiently explains the latent construct it is associated with. Table 5 presents the indicator loadings for each construct in the outer model. As shown in the table, all loadings exceed the minimum threshold of 0.60, confirming that each indicator makes a strong contribution to its respective construct.

As shown in Table 5, the outer model results reveal that all indicator loadings exceed the recommended minimum threshold of 0.60 [22], suggesting that each item reliably contributes to its corresponding latent construct. Notably, the highest loading appears in the cloud accounting construct, with automated bookkeeping usage (0.84) and ease of use (0.81) performing strongest. This validates the central role of technology usability and functionality as proposed in the TAM. Within the SAK EMKM compliance construct, the asset classification indicator (0.76) leads in explaining compliance behavior, which aligns with institutional expectations, as accurate asset recording is a critical requirement under SAK EMKM and often serves as a baseline for standard adoption. Meanwhile, within the financial reporting quality construct, audit readiness (0.78) emerges as the strongest indicator, suggesting that MSMEs benefiting from both compliance and digital tools are better prepared for external verification

processes. These results reinforce the conceptual validity of the measurement model and offer additional support for the structural findings presented earlier.

Table 5.
Indicator Loadings from Outer Model

Construct	Indicator	Loading
SAK EMKM Compliance	Asset classification	0.76
	Equity structure	0.71
	Financial notes	0.69
Cloud accounting adoption	Auto bookkeeping use	0.84
	Tax integration	0.79
	Ease of use	0.81
Financial reporting quality	Timeliness	0.72
	Accuracy	0.74
	Audit readiness	0.78

Moreover, they underscore that not all indicators contribute equally within constructs; hence, policy emphasis and software design should prioritize the most impactful elements (e.g., automation, audit support, classification templates). Figure 4 visualizes the interaction effects on financial reporting quality across three groups of MSMEs: those that comply with SAK EMKM only, those that adopt cloud accounting only, and those that combine both. The average scores clearly illustrate the synergies between the regulatory and technological.

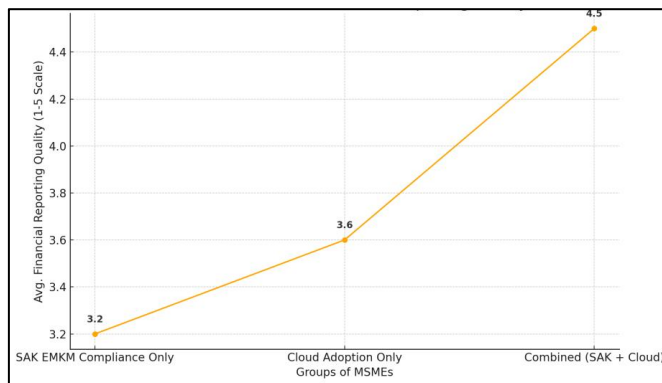


Fig. 4. Interaction effects on financial reporting quality.

As depicted in Fig. 4, MSMEs that integrate SAK EMKM compliance with cloud accounting adoption exhibit the highest average financial reporting quality (4.5). This is significantly higher than the scores of MSMEs that adopt either SAK EMKM alone (3.2) or cloud accounting alone (3.6). This finding supports the hypothesis that the combination of regulatory compliance and technology adoption has a greater impact on financial reporting quality than either factor alone. The results presented in Fig. 4 also underscore the importance of prioritizing key indicators that most strongly influence financial reporting outcomes. In particular, the use of auto-bookkeeping (0.84) and audit readiness (0.78) emerge as the most influential factors for improving reporting quality, both of which are facilitated by cloud accounting. These findings suggest that policymakers and software developers should emphasize automation and audit-ready features when designing tools for MSMEs.

To further explore the practical implications of regulatory compliance and technology adoption, we examined the average financial reporting quality scores across three groups of

MSMEs. These groups were categorized based on their compliance with SAK EMKM and adoption of cloud-based accounting tools. The data provide valuable insights into the extent to which each factor, individually or in combination, contributes to the quality of financial reporting among MSMEs. Table 6 presents the average reporting quality for each group, comparing those that comply with SAK EMKM, those that adopt cloud-based accounting, and those that integrate both.

Table 6.
Average Reporting Quality by Compliance and Technology Usage

Group	SAK EMKM Compliance	Cloud-Based Accounting	Avg. Financial Reporting Quality
Compliance only	Yes	No	3.2
Cloud adoption only	No	Yes	3.6
Combined (compliance + cloud)	Yes	Yes	4.5

Table 6 clearly illustrates the synergistic effect between SAK EMKM compliance and cloud-based accounting adoption on the average financial reporting quality. The results show that MSMEs in the Compliance Only group, which adhere to SAK EMKM but do not adopt cloud-based accounting, exhibit the lowest average reporting quality (3.2). This suggests that while regulatory compliance improves reporting practices, the absence of digital tools limits the overall quality and efficiency of financial reporting. On the other hand, the Cloud Adoption Only group, which adopts cloud-based accounting without SAK EMKM compliance, demonstrates a moderate improvement in reporting quality (3.6). While cloud accounting tools offer benefits such as automation and real-time updates, the lack of regulatory adherence still poses challenges to achieving the highest standards of financial transparency and accuracy.

B. Discussion

The findings of this study confirm that integrating regulatory compliance with digital technology adoption yields a greater improvement in MSME financial reporting quality than implementing each component in isolation. The results show that MSMEs that adopt both SAK EMKM compliance and cloud-based accounting systems achieve the highest reporting quality. This indicates that although financial reporting standards provide essential guidelines for improving transparency and consistency, their effectiveness depends on the availability of appropriate information systems that support implementation in daily business activities.

From an Institutional Theory perspective, SAK EMKM serves as a formal regulatory mechanism that encourages MSMEs to enhance accountability and standardize financial reporting practices. However, compliance requirements alone may create operational challenges, particularly for MSMEs with limited accounting knowledge, human resources, and technical capabilities. The adoption of cloud-based accounting systems helps overcome these barriers by transforming regulatory requirements into automated and user-friendly

digital processes. Therefore, technology acts as an enabling mechanism that bridges the gap between regulatory expectations and practical implementation.

The findings are also consistent with the TAM, which emphasizes that perceived usefulness and ease of use influence technology adoption. The high contribution of automated bookkeeping, tax integration, and ease-of-use indicators demonstrates that MSMEs are more likely to benefit from digital accounting platforms when these systems reduce complexity and improve operational efficiency. Cloud accounting adoption not only replaces manual accounting activities but also enhances MSMEs' ability to produce more accurate, timely, and audit-ready financial information.

From an information systems perspective, this study extends previous research by demonstrating that cloud-based accounting serves as a strategic digital infrastructure rather than merely accounting software. The proposed model highlights that the value of information systems emerges when technological adoption is aligned with organizational and regulatory needs. This integration creates a dual-path mechanism in which institutional compliance establishes reporting standards, while cloud technology facilitates the effective execution and continuous improvement of financial reporting processes.

Comparison with previous relevant studies further clarifies the contribution of the present findings. Also, [2] and [6] demonstrated that digital accounting applications and accounting information technology can facilitate the implementation of SAK EMKM and improve the quality of MSME financial statements. However, these studies did not empirically examine cloud accounting as a mechanism connecting regulatory compliance with reporting outcomes. Similarly, [9] showed that perceived usefulness, ease of use, and technological readiness are important determinants of cloud accounting adoption, while [10] and [11] emphasized the efficiency and digital transformation benefits of cloud-based accounting systems. Consistent with these findings, the present study confirms that cloud-based accounting is positively associated with financial reporting quality ($\beta = 0.45$).

Nevertheless, this study extends previous research by integrating regulatory compliance and technology adoption within a single information systems model. SAK EMKM compliance directly improves reporting quality ($\beta = 0.32$) and is strongly associated with cloud accounting adoption ($\beta = 0.58$). Moreover, MSMEs that combine SAK EMKM compliance with cloud accounting achieve a higher reporting quality score (4.5) than those relying on compliance alone (3.2) or cloud accounting alone (3.6). These findings indicate that cloud accounting complements, rather than replaces, regulatory compliance in improving the quality of MSME financial reporting.

These results provide practical implications for policymakers, fintech providers, and MSME development programs. Policymakers should encourage the development of cloud accounting ecosystems that are aligned with national financial reporting standards. At the same time, software

developers should prioritize features such as automated classification, compliance monitoring, tax integration, and audit readiness. Strengthening the connection between regulatory frameworks and digital platforms can accelerate MSME digital transformation, improve financial transparency, and increase access to formal financial services.

V. CONCLUSION

This study demonstrates that integrating SAK EMKM compliance with the adoption of cloud-based accounting significantly improves the quality of financial reporting among Indonesian MSMEs. The findings show that SAK EMKM compliance positively affects reporting quality, but this effect is stronger when supported by cloud accounting systems. MSMEs that combine regulatory compliance with cloud-based accounting achieve the highest average reporting quality score of 4.5, compared with 3.2 for MSMEs that comply with SAK EMKM only and 3.6 for those adopting cloud accounting without regulatory compliance. These results confirm the synergistic relationship between institutional compliance and digital accounting technology.

From an information systems perspective, cloud-based accounting serves as an enabling mechanism that translates regulatory requirements into more practical, operational financial reporting processes. By automating bookkeeping, tax calculation, invoicing, and financial reporting, cloud accounting systems reduce the complexity of compliance and help MSMEs overcome barriers such as limited accounting knowledge, low digital literacy, and weak reporting discipline. Therefore, cloud accounting should not be viewed merely as a financial application, but as a strategic information system that strengthens compliance capability, reporting transparency, and organizational accountability.

The study provides practical implications for policymakers, MSME educators, fintech providers, and software developers. Policymakers should promote integrated digital solutions that align cloud accounting platforms with SAK EMKM requirements. At the same time, software developers should design systems that are simple, audit-ready, and suitable for MSME operational capacity. Such integration can support broader financial inclusion, improve access to financing, and strengthen the formalization of the MSME sector. This study has several limitations. The analysis relies on secondary data and cross-sectional indicators, which may not fully capture changes in compliance behavior and technology adoption over time. Future research should validate the proposed information systems model using longitudinal data, primary survey data, and comparative studies across different ASEAN countries. Further studies may also examine the roles of policy incentives, digital literacy programs, and platform usability in encouraging MSMEs to adopt cloud accounting systems that align with national financial reporting standards.

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