International Journal of Economic, Business, Accounting, Agriculture Management and Sharia Administration (IJEBAS)

International Journal of Economic, Business, Accounting, Agriculture Management and Sharia Administration (IJEBAS Journal) | ISSN (e): 2808-4713
Volumes 5 No. 6 (2025)

EVALUATING THE SUCCESS OF CLOUD ACCOUNTING IN CAFES AND RESTAURANTS IN PEMATANG SIANTAR: PERSPECTIVE OF THE INFORMATION SYSTEM SUCCESS THEORY

Fitri Ramadhani[1]*, Sambas Ade Kesuma[2] and Parapat Gultom[3]
[1,2,3] Universitas Sumatera Utara
Corresponding E-mail: fitriramadhani1401@gmail.com[1]* , sambas@usu.ac.id[2] , parapat@usu.ac.id[3]

Received	: 25 September 2025	Published	: 01 November 2025
Revised	: 03 October 2025	DOI	: https://doi.org/10.54443/ijebas.v5i6.4398
Accepted	: 25 October 2025	Link Publish	: https://radjapublika.com/index.php/IJEBAS

Abstract

The implementation of cloud accounting in cafes and restaurants is expected to improve operational efficiency, enhance the accuracy of financial reports, and provide net benefits for businesses. However, in practice, the success of implementation still faces several challenges, such as suboptimal system quality, information quality, and service quality.This study aims to analyze the effect of system quality, information quality, and service quality on cloud accounting success, as well as the effect of cloud accounting success on net benefits among cafes and restaurants in Pematang Siantar City. The research design employs a quantitative approach using primary data. The sample consists of owners or managers, and accounting and finance staff from 170 cafes and restaurants in Pematang Siantar City. Sampling was conducted using a full sampling technique, resulting in a total of 265 respondents. Data analysis was conducted using Structural Equation Modeling (SEM). The findings indicate that system quality, information quality, and service quality have a positive effect on cloud accounting success, and cloud accounting success positively affects net benefits. Furthermore, cloud accounting success is proven to mediate the relationship between system quality, information quality, and service quality with net benefits.

Keywords: ***Cloud Accounting, System Quality, Information Quality, Service Quality, Cloud Accounting Success, Net Benefits, Cafes and Restaurants in Pematang Siantar.***

INTRODUCTION

Accounting Information Systems (AIS) play a crucial role in organizations as they provide relevant and reliable information to support planning, control, and decision-making (Alrfai et al., 2023). With the rapid advancement of digital technology, the adoption of *Cloud Computing (CC)* has transformed how accounting information is managed. CC refers to the use of remote servers over the internet to store, manage, and process data, offering three service models: Software as a Service (SaaS), Platform as a Service (PaaS), and Infrastructure as a Service (IaaS) (Mell & Grance, 2009). Among these, SaaS has gained wide adoption among Indonesian micro, small, and medium enterprises (MSMEs), including those in the food and beverage industry (Ghozali et al., 2019). Cloud Accounting (CA) is a form of SaaS specifically designed for financial and accounting functions (Khanom, 2017). CA allows businesses to access accounting systems anytime and anywhere, improving operational efficiency, data accuracy, and cost savings (Saltan & Smolander, 2021). Studies show that CA adoption has significantly enhanced business performance across different countries boosting operational efficiency in Australia (Sastararuji et al., 2022), reducing external auditor dependency in Thailand, and driving innovation in the United States (Saad, 2023). In Indonesia, the adoption of CA continues to increase. According to Cekindo Business International (2022), the market for cloud-based accounting solutions is expected to grow by 13% annually. The Centre for Strategic and International Studies reported that cloud services could contribute up to IDR 35 trillion to the Indonesian economy. A 2022 PwC survey found that 80% of Indonesian companies have adopted cloud technology to optimize their IT operations, with 19.4% transitioning to non-cloud platforms (Syahrani & Pradesa, 2023). The MSME sector plays a dominant role in Indonesia's economy, contributing over 60% to the national GDP and employing millions of workers (Sofyan, 2017). Technology integration in MSMEs enhances operational efficiency, managerial capability, and data reliability (Luthfi, 2020). Within this sector, the food and beverage industry has one of the highest digital adoption rates Katadata, 2022, particularly in North Sumatra, which ranks fourth in the number of cafés and restaurants in Indonesia.

Pematang Siantar, the province's third-largest city, serves as a strategic tourism gateway to Lake Toba and the Sidamanik tea plantation (BPS, 2021). This growing culinary tourism sector drives demand for efficient and reliable accounting systems, making CA adoption an important research focus.

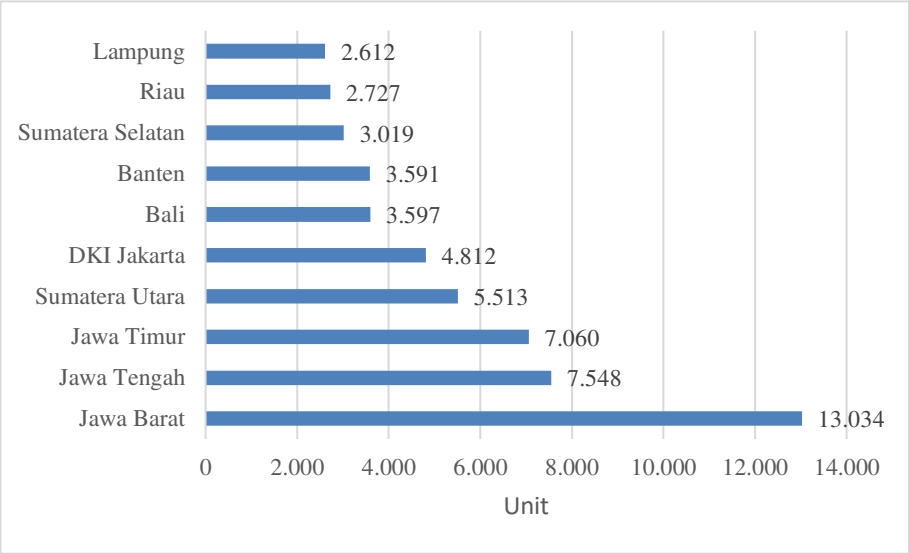

Figure 1 Percentage of MSMEs Adopting Digital Technology
(Source: databoks.katadata.co.id, 2022)

To assess CA implementation success, this study adopts the Information System Success Model developed by DeLone and McLean (2003), which evaluates system performance through six interrelated dimensions: system quality, information quality, service quality, use, user satisfaction, and net benefits. In this study, cloud accounting success (CAS) is represented through system usage and user satisfaction, with net benefits reflecting the extent to which CA contributes to business performance. However, there are still challenges in using CA. Some businesses worry about data security and privacy (Al-Okaily et al., 2022). Internet problems can also interrupt system access and daily operations (Pargmann et al., 2023). Subscription fees may become a long-term burden for small businesses (Al-Okaily et al., 2022). In addition, previous studies have shown mixed results about the effects of system quality, information quality, and service quality on CA success (Akrong et al., 2022; Lutfi, 2023; Roky & Meriouh, 2015). Most of these studies were conducted in other areas such as e-learning or e-government (Sabeh et al., 2021; Wang & Liao, 2008). Therefore, this study aims to fill the gap by empirically examining how system quality, information quality, and service quality affect cloud accounting success and how CA success, in turn, influences net benefits in cafés and restaurants in Pematang Siantar. This study provides both theoretical and practical contributions extending the DeLone and McLean (2003) model within the Indonesian context and offering insights for business owners and system developers to improve the success of cloud-based accounting adoption.

LITERATURE REVIEW

Information System Success Model (ISS)

ISS model was first developed by DeLone and McLean (1992) and later updated in 2003. This model is widely used to measure the success of an information system. It includes six key dimensions: system quality, information quality, service quality, use, user satisfaction, and net benefits. According to DeLone and McLean (2003), the three quality dimensions system, information, and service quality directly influence use and user satisfaction. Higher user satisfaction and effective system use will then lead to greater net benefits for both individuals and organizations. The model has been used in various fields such as e-learning, e-government, and e-commerce, and it is also suitable for evaluating the success of CA.

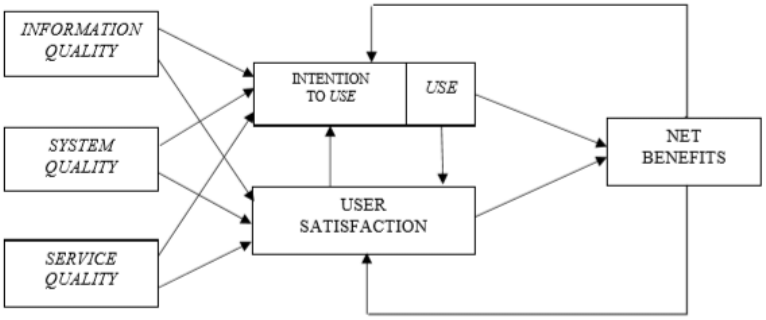

Figure 2 Conceptual Framework
(Source: DeLone & McLean, 2003)

Cloud Accounting (CA)

CA refers to accounting systems that use cloud-based platforms, where users can record, process, and access financial data online through the internet (Khanom, 2017). It allows real-time data access and storage on remote servers owned by service providers. Cloud accounting helps businesses improve efficiency, reduce costs, and provide more accurate financial reports (Saltan & Smolander, 2021). CA adoption is increasing globally. In developed countries such as Australia and the United States, CA helps companies increase productivity and competitiveness (Sastararuji et al., 2022; Saad, 2023). In Indonesia, CA is widely adopted by MSMEs, especially in the food and beverage industry, which has a high level of digitalization (Katadata, 2022). Despite its advantages, users still face several challenges, such as data security risks, unstable internet connections, and subscription costs (Al-Okaily et al., 2022; Pargmann et al., 2023).

System Quality (SQ)

SQ measures the technical performance of an information system. It includes characteristics such as reliability, ease of use, flexibility, accessibility, and integration (DeLone & McLean, 2003). In cloud accounting, system quality represents how well the application performs its functions without error and how easily users can operate it. A system with high reliability and user-friendly features encourages frequent use and higher user satisfaction. Previous studies found that SQ positively influences system use and user satisfaction (Akrong et al., 2022; Al-Okaily et al., 2020). Therefore, system quality is one of the most important elements in ensuring the success of cloud accounting implementation.

Information Quality (IQ)

IQ refers to the output quality of the system, including accuracy, relevance, completeness, timeliness, and clarity of the information provided (DeLone & McLean, 2003). In cloud accounting, IQ ensures that financial information is accurate, up-to-date, and suitable for managerial decision-making. Research by Lutfi (2023) and Iqbal et al. (2022) found that good information quality improves user satisfaction and perceived usefulness of accounting systems. Accurate and timely financial information also contributes to better business performance and organizational benefits.

Service Quality (ServQ)

ServQ relates to the support provided by the system provider to users. It includes responsiveness, reliability, empathy, and assurance in dealing with user problems (DeLone & McLean, 2003). High-quality service ensures that users receive immediate assistance when encountering technical issues, thereby improving their satisfaction and trust in the system. In the context of CA, good service quality from software vendors such as providing tutorials, updates, and customer support encourages continuous use of the system and enhances overall user satisfaction (Riady et al., 2024; Akrong et al., 2022).

Cloud Accounting Success (CAS) and Net Benefits (NB)

CAS is measured by how often users use the system and how satisfied they are with it. When users perceive that the system meets their needs and improves their work, the system can be considered successful (DeLone & McLean, 2003). NB represent the positive impact of system use on individuals and organizations, such as improved efficiency, reduced errors, better decision-making, and cost savings. Studies show that CAS has a direct positive effect on net benefits (Lutfi, 2023; Wang et al., 2019).

METHOD

This study used a quantitative approach with a survey method by distributing questionnaires based on the research variables. The questionnaire was developed from the DeLone and McLean (2003) Information System Success Model, covering SQ, IQ, ServQ, CAS, and NB. The questionnaire utilized a 5-point Likert scale to measure the level of respondents' agreement with each statement. The study was cross-sectional, conducted at one point in time to capture the current condition of CA use. The population consisted of cafés and restaurants in Pematang Siantar that have adopted cloud accounting systems. Using a purposive sampling method, 265 respondents were selected from 170 cafés and restaurants, including owners, managers, and accounting staff. Data were analyzed with the SEM-PLS technique. The analysis included the outer model (to test validity and reliability) and the inner model (to test relationships between variables and hypothesis significance). This method allows an objective evaluation of how system, information, and service quality affect CAS and its NB. Data were collected online through Google Forms to save time and cost while adapting to respondents' schedules. The study used primary data from cafés and restaurants in Pematang Siantar that apply CAS. Respondents completed a 5-point Likert scale questionnaire independently. The collected data were analyzed using SmartPLS, which tested the relationships between SQ, IQ, ServQ, CAS, and NB.

RESULTS AND DISCUSSION

Respondent Demographic Profile

The demographic profile of the 265 respondents participating in this research provides a comprehensive overview of individuals involved in the implementation and daily use of CA systems in cafés and restaurants across Pematang Siantar. The respondent composition reflects a balanced distribution of gender, diverse educational backgrounds, productive age ranges, and occupational roles relevant to financial and managerial operations.

Table 1 Respondent Demographic Profile Summary

Characteristic	Category	Frequency	Percentage
Gender	Male	114	43
	Female	151	57
Education	Senior High School (SMA/SMK)	169	63.8
	Diploma	40	15.1
	Bachelor (S1)	52	19.6
	Master/Doctorate (S2/S3)	4	1.5
Age	17–25 years	95	35.8
	26–35 years	93	35.1
	36–50 years	70	26.4
	>50 years	7	2.7
Position	Owner/Manager	115	43.4
	Accounting and Finance Staff	150	56.6
Total Respondents		265	100

This demographic composition illustrates that the adoption and use of CA systems are primarily driven by female users (57%), who often handle financial, administrative, and cashier roles within small and medium-scale food businesses. The educational profile shows that most users hold a Senior High School education (63.8%), highlighting the accessibility and user-friendliness of CA platforms, which do not require advanced accounting or IT expertise. In terms of age distribution, respondents are predominantly within the 17–35-year-old range (70.9%), representing a young, digitally literate workforce with high adaptability to technology-based systems. This suggests that CA adoption is most prevalent among individuals in early productive ages who are familiar with digital applications. Occupationally, accounting and finance staff constitute 56.6% of respondents, while owners or managers represent 43.4%, indicating that CA usage extends from operational-level users to strategic decision makers. The involvement of both managerial and accounting personnel ensures that the responses reflect both administrative control and hands on operational perspectives. Overall, the respondent profile demonstrates a well distributed, technologically adaptive, and practically engaged group that accurately represents the café and restaurant sector in Pematang Siantar. Their demographic characteristics strengthen the reliability of this study's

findings on the success of CA implementation in the context of small business operations.

Structural Equation Modeling-Partial Least Square (SEM-PLS) Analysis

Data processing in this research was carried out using the Structural Equation Modeling (SEM) approach, with one type of model applied simultaneously. All variables, namely System Quality (KS), Information Quality (KI), Service Quality (KL), Cloud Accounting Success (KCA), and Net Benefits (MB), were analyzed using a reflective measurement model. In this study, the reflective model was applied to all variables mentioned. The SEM analysis process was conducted by employing a method that aligns with the characteristics of the collected data. The research model used in this study can be seen in Figure 3, which illustrates the relationships among System Quality, Information Quality, and Service Quality as exogenous variables, Cloud Accounting Success as the mediating variable, and Net Benefits as the endogenous variable.

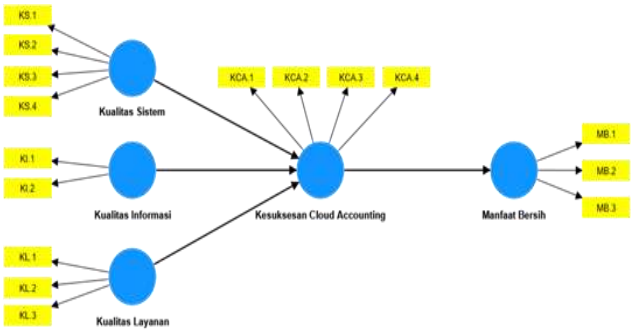

Figure 3 PLS-SEM Statistical Model

Outer Model Evaluation (Measurement Model)

To meet the validity requirements, each indicator of the variables must have an outer loading value greater than 0.7. The outer loading values for each indicator within the constructs are presented in Table 2 and illustrated in Figure 4. In this model, all indicators were analyzed based on their respective outer loading values. The validation process was conducted to ensure that all indicators met the required threshold. Further details regarding these values can be found in the corresponding tables and figures provided.

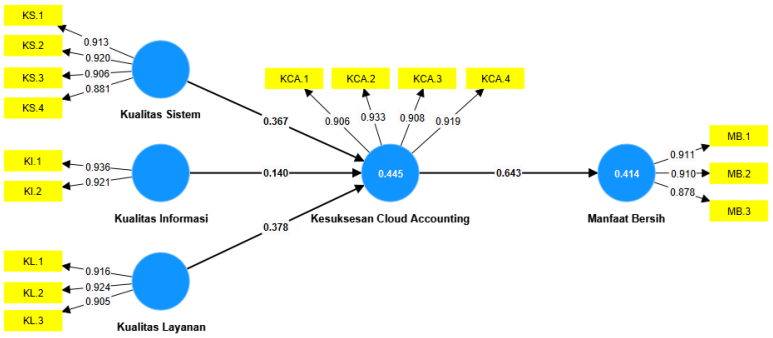

Figure 4 PLS-SEM Measurement Model

Based on the results of construct reliability and validity analysis, all variables demonstrated good internal consistency, with Cronbach's alpha values exceeding 0.7. The highest Cronbach's alpha was recorded for System Quality (0.927), while the lowest was for Net Benefits (0.889). Similarly, rho_A values were high across all constructs, indicating strong reliability. The Composite Reliability (CR) values for all variables also exceeded 0.7, with System Quality showing the highest reliability. Construct validity, measured through Average Variance Extracted (AVE), showed values above the 0.5 threshold for all variables, confirming adequate convergent validity. These results indicate that the research instrument fulfills the required reliability and validity criteria for further structural model analysis.

Tabel 2 Construct Reliability and Validity

Variabel	*Cronbach's Alpha*	*rho_Alpha*	*Composite Reliability*	*Average Variance Extracted* (AVE)
KS	0.926	0.929	0.948	0.819
KI	0.841	0.847	0.926	0.862
KL	0.903	0.903	0.939	0.838
KCA	0.936	0.937	0.955	0.840
MB	0.882	0.887	0.927	0.810

Table 3 presents the results of the Fornell-Larcker discriminant validity test, confirming that discriminant validity is achieved. The square root of AVE for each construct is greater than its correlations with other constructs. For example, System Quality (KS) has a diagonal value higher than its correlations with Information Quality (KI), Service Quality (KL), Cloud Accounting Success (KCA), and Net Benefits (MB). Similarly, KCA and MB also show AVE values greater than their correlations with other variables. This indicates that each construct more accurately measures its own variable than others within the model. Furthermore, all outer loading values exceed 0.7, and all AVE values are above the 0.5 threshold, confirming that the model satisfies the requirements for both discriminant and convergent validity in further analysis.

Table 3 Discriminant Validity with Fornell & Larcker Approach

Variabel	KCA	KI	KL	KS	MB
KCA	**0.917**				
KI	0.372	**0.929**			
KL	0.531	0.312	**0.915**		
KS	0.523	0.310	0.300	**0.905**	
MB	0.643	0.482	0.360	0.452	**0.900**

Table 4 shows that each indicator has the highest loading value on its original construct compared to other constructs. This indicates that discriminant validity has been achieved, demonstrating that each indicator consistently measures its intended construct without any discriminant validity issues.

Table 4 Cross Loading

Item Indikator	KCA	KI	KL	KS	MB
KS.1	0.465	0.324	0.309	0.913	0.404
KS.2	0.505	0.261	0.262	0.920	0.415
KS.3	0.473	0.269	0.250	0.906	0.414
KS.4	0.449	0.269	0.266	0.881	0.404
KI.1	0.362	0.936	0.309	0.295	0.447
KI.2	0.326	0.921	0.269	0.279	0.448
KL.1	0.490	0.316	0.916	0.267	0.332
KL.2	0.484	0.288	0.924	0.261	0.307
KL.3	0.485	0.252	0.905	0.295	0.350
KCA.1	0.906	0.310	0.495	0.477	0.560
KCA.2	0.933	0.332	0.496	0.469	0.588
KCA.3	0.908	0.360	0.476	0.497	0.608
KCA.4	0.919	0.359	0.482	0.475	0.601
MB.1	0.620	0.442	0.362	0.401	0.911
MB.2	0.576	0.433	0.295	0.400	0.910
MB.3	0.536	0.424	0.313	0.422	0.878

Inner Model Evaluation (Structural Model)

Table 5 presents the collinearity evaluation conducted to examine whether there is a strong correlation among variables using the VIF values (Hair et al., 2020). To avoid multicollinearity, the VIF value should be less than 5. The results show that all VIF values are below 5, indicating that no correlation exists among the variables.

Table 5 Collinearity evaluation (VIF)

Variabel	VIF
KCA → MB	1
KS → KCA	1.165
KI → KCA	1.175
KL → KCA	1.167

This section presents the results of the significance test (bootstrapping), which evaluates how well each measurement item represents its variable. The analysis revealed that System Quality (KS) significantly influences Cloud Accounting Success (KCA) with a coefficient of 0.367 (p = 0.000). Similarly, Information Quality (KI) shows a significant positive effect on KCA with a coefficient of 0.140 (p = 0.017), and Service Quality (KL) also has a significant positive impact on KCA with a coefficient of 0.378 (p = 0.000). Furthermore, Cloud Accounting Success (KCA) significantly affects Net Benefits (MB) with a coefficient of 0.643 (p = 0.000).

Table 6 Path Coefficient Test and Significance of Direct Effect

Variabel	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
KS → KCA	0.367	0.366	0.066	5.549	0.000
KI → KCA	0.140	0.141	0.059	2.392	0.017
KL → KCA	0.378	0.378	0.061	6.203	0.000
KCA → MB	0.643	0.642	0.052	12.389	0.000

KCA significantly mediates the relationship between KS and MB (T = 4.727, p = 0.000), KI and MB (T = 2.244, p = 0.025), and KL and MB (T = 5.877, p = 0.000). Thus, all hypotheses are accepted. The mediation test results are presented in Table 7.

Table 7 Mediation Test

Variabel	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
KS-> KCA-> MB	0.236	0.236	0.050	4.727	0.000
KI-> KCA-> MB	0.090	0.091	0.040	2.244	0.025
KL-> KCA-> MB	0.243	0.242	0.041	5.877	0.000

The total effect test shows that all relationships between variables are positive and significant. KS significantly affects KCA (β = 0.367, p = 0.000) and MB (β = 0.236, p = 0.000). KI has a significant effect on KCA (β = 0.140, p = 0.017) and MB (β = 0.090, p = 0.025). KL exerts the strongest influence on KCA (β = 0.378, p = 0.000) and MB (β = 0.243, p = 0.000). Finally, KCA has the most dominant effect on MB (β = 0.643, p = 0.000). Overall, KS, KI, and KL contribute to MB both directly and indirectly through KCA as a key mediating variable. The total effect results are shown in Table 8.

Table 8 Total Effect Test

Variabel	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
KS -> KCA	0.367	0.366	0.066	5.549	0.000
KS -> MB	0.236	0.236	0.050	4.727	0.000
KI -> KCA	0.140	0.141	0.059	2.392	0.017
KI -> MB	0.090	0.091	0.040	2.244	0.025
KL -> KCA	0.378	0.378	0.061	6.203	0.000
KL -> MB	0.243	0.242	0.041	5.877	0.000
KCA -> MB	0.643	0.642	0.052	12.389	0.000

Based on the analysis results in Table 8, the R-square value for KCA is 0.445, indicating that 44.5% of the

variability in KCA can be explained by the independent variables in the model. The adjusted R-square value for KCA is 0.438, reflecting a refined model fit for better accuracy in representing the relationships among variables. Meanwhile, the R-square value for MB is 0.414, meaning that 41.4% of the variation in MB is explained by the variables in the model. The adjusted R-square value for MB is 0.411, showing that even after accounting for the number of predictors, the model maintains a strong explanatory capability. Overall, these results indicate that the research model has a good ability to explain the relationships among the studied variables. The R-square values are presented in Table 9.

Table 9 R-Square

Variabel	R-*square*	R-*square adjusted*
KCA	0.445	0.438
MB	0.414	0.411

Based on the analysis results in Table 10, the structural model's goodness of fit was assessed using the predictive relevance (Q^2) value. The Q^2 value greater than 0 indicates that the model has predictive relevance. The calculation results show that the Q^2 value for KCA is 0.418 and for MB is 0.280. This means that 41.8% of the variance in the data can be explained by the research model, while the remaining 58.2% is explained by other factors outside the model. Therefore, the research model is considered to have an adequate level of goodness of fit. The Q^2 values are presented in Table 10.

Table 10 Q-Square

Variabel	RMSE	MAE	Q^2predict
KCA	0.770	0.563	0.418
MB	0.858	0.649	0.280

The f-square values are categorized into three levels: 0.02 (small), 0.15 (moderate), and 0.35 (large) effects (Hair et al., 2020). The analysis shows that KS has a moderate effect on KCA with an f-square value of 0.208, indicating a meaningful contribution in explaining KCA. KI has a small effect on KCA with an f-square of 0.030, suggesting that improvements in providing accurate, relevant, and easily understood information are needed to better support KCA. KL shows a moderate effect on KCA with an f-square value of 0.220, highlighting its significant role in explaining KCA. Meanwhile, KCA demonstrates the strongest effect on MB with an f-square value of 0.706, indicating a very substantial contribution in explaining the variability of MB. The f-square values are presented in Table 11.

Table 11 *Effect Size (f^2)*

Variabel	*f-square*
KS -> KCA	0.208
KI -> KCA	0.030
KL -> KCA	0.220
KCA -> MB	0.706

One of the criteria for assessing the goodness of fit (GoF) is the standardized root mean square residual (SRMR). A model is considered acceptable if SRMR < 0.10, and categorized as a perfect fit when SRMR < 0.08, while values > 0.10 indicate a weak fit requiring improvement (Hair et al., 2020). As shown in Table 12, the SRMR value is 0.062, indicating that the model demonstrates a good (perfect) fit with the empirical data.

Table 12 GoF Test Based on SRMR

Variabel	*Saturated model*	*Estimated model*
SRMR	0.036	0.062
d_ULS	0.172	0.528
d_G	0.212	0.240
Chi-square	359.334	393.108
NFI	0.893	0.883

Discussion

This study tested seven hypotheses, all of which were supported by the data. The findings revealed that System Quality (KS), Information Quality (KI), and Service Quality (KL) each had a positive and significant effect on Cloud Accounting Success (KCA), while KCA itself significantly influenced Net Benefits (MB). Moreover, KCA was found to mediate the relationships between KS, KI, and KL with MB, confirming its key role in translating system effectiveness into tangible organizational benefits. KS showed a positive and significant effect on KCA, indicating that a reliable, responsive, and user-friendly system enhances the success of cloud accounting implementation. This finding supports the DeLone and McLean (2003) Information System Success Model, which emphasizes that well-

designed systems improve user satisfaction and performance. Most respondents, consisting mainly of accounting and finance staff (56%) in the productive age group (17–35 years), perceived system usefulness as the strongest indicator of KS. These results align with prior studies by Akrong et al. (2022), Riady et al. (2024), and Saad (2023), confirming that system quality plays a crucial role in determining system success.

KI was also found to have a positive and significant effect on KCA. This indicates that accurate, relevant, and timely information improves user trust and system success. Respondents rated "Information Update" as the highest indicator, suggesting that cloud accounting's ability to provide real-time financial information enhances decision-making efficiency. These findings are consistent with D&M (2003) and studies by Iqbal et al. (2022), Lutfi (2023), and Riady et al. (2024), emphasizing that high-quality information drives successful system use and satisfaction.

KL demonstrated a positive and significant impact on KCA, confirming that responsive support and service provider competence strengthen user satisfaction and trust. The "Responsiveness" indicator was rated the highest by respondents, reflecting the importance of quick, helpful, and professional assistance. This finding is consistent with prior studies (Akrong et al., 2022; Lutfi, 2023; Riady et al., 2024), reinforcing that excellent service quality contributes to higher system success.

KCA had the strongest positive and significant effect on MB, confirming that successful system use leads to improved efficiency, accuracy, and overall business performance. The "Repeat Purchase" indicator received the highest score, showing that users who experienced tangible benefits were more likely to continue using the system. These findings align with D&M (2003) and prior research (Lutfi, 2023; Saad, 2023), which highlight that effective information systems deliver measurable organizational benefits.

KCA significantly mediated the relationships between KS, KI, and KL with MB, with all p-values < 0.05. This indicates that the influence of system, information, and service quality on business benefits operates primarily through the successful implementation of cloud accounting. A reliable system, high-quality information, and strong service support collectively enhance KCA, which in turn increases the organization's perceived benefits.

Overall, these findings confirm the relevance of the DeLone and McLean (2003) model in the context of cafes and restaurants in Pematang Siantar. System, information, and service quality serve as the foundation for successful cloud accounting implementation, while KCA acts as a crucial bridge linking system success to tangible business outcomes. This emphasizes that technological reliability, data accuracy, and service responsiveness are key drivers of sustainable digital transformation in the accounting field.

CONCLUSION

This study examined the influence of System Quality (KS), Information Quality (KI), and Service Quality (KL) on Net Benefits (MB) through Cloud Accounting Success (KCA) among cafés and restaurants in Pematang Siantar using SmartPLS and SPSS. The results show that all three variables significantly affect MB through KCA, with KCA acting as a key mediator. KL has the strongest effect on KCA, while KCA provides the greatest contribution to MB, highlighting its crucial role in improving business efficiency and performance. Theoretically, this research strengthens the DeLone and McLean (2003) model by providing empirical evidence in the SME context, showing that KS, KI, and KL enhance MB through KCA. Practically, it offers insights for business owners and managers to improve financial management through reliable and responsive cloud accounting systems. The findings also provide guidance for policymakers and technology providers to encourage digitalization in the food and beverage sector. Overall, the study emphasizes the importance of KCA as a bridge between system quality and business value, supporting digital transformation and sustainable growth among SMEs in Indonesia.

REFERENCES

Akrong, G. B., Yunfei, S., & Owusu, E. (2022). Development and validation of an improved DeLone-McLean IS success model – application to the evaluation of tax administration ERP. *International Journal of Accounting Information Systems*, *47*, 1-19. https://doi.org/10.1016/j.accinf.2022.100579.

Al-Okaily, M., Alkhwaldi, A.F., Abdulmuhsin, A.A., Alqudah, H. and Al-Okaily, A. (2022), "Cloud-based accounting information systems usage and its impact on Jordanian SMEs' performance: the post-COVID-19 perspective", *Journal of Financial Reporting and Accounting*, Vol. 21 No. 1, pp. 126-155. https://doi.org/10.1108/JFRA-12-2021-0476.

Alrfai, M. M., Alqudah, H., Lutfi, A., Al-Kofahi, M., Alrawad, M., & Almaiah, M. A. (2023). The influence of artificial intelligence on the AISs efficiency: Moderating effect of the cyber security. *Cogent Social Sciences, 9*(2), 2243719. https://doi.org/10.1080/23311886.2023.2243719.

Badan Pusat Statistik Kota Pematang Siantar. (2021). *Kota Pematang Siantar dalam angka 2021*. BPS Kota

Pematang Siantar. https://siantarkota.bps.go.id/publication/2021/02/26/f527ea56a8f2820d148ff5b2/kota-pematang-siantar-dalam-angka-2021.html.

DeLone, W. H., & McLean, E. R. (1992). Information systems success: The quest for the dependent variable. *Information Systems Research, 3*(1), 60–95. https://doi.org/10.1287/isre.3.1.60.

DeLone, W. H., & McLean, E. R. (2003). The DeLone and McLean model of information systems success: A ten-year update. *Journal of Management Information Systems, 19*(4), 9–30. https://doi.org/10.1080/07421222.2003.11045748.

Ghozali, M. I., Sugiharto, W. H., & Afifi, Z. (2019). Cloud computing sebagai strategi optimasi perluasan target pasar usaha kecil menengah dalam menghadapi revolusi industri 4.0. *Jurnal Mantik Penusa, 3*(1.1), 1–7.

Hair, J. F., Howard, M. C., & Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. Journal of Business Research, 109, 101–110. https://doi.org/10.1016/j.jbusres.2019.11.069.

Iqbal, M., & Rafiq, M. (2023). Psychometric analysis of Integrated Digital Library User Success (IDLUS) Scale in academic digital library environment. *Global Knowledge, Memory and Communication.* Advance online publication. https://doi.org/10.1108/GKMC-06-2022-0127.

Khanom, M. T. (2017). Cloud accounting: A theoretical overview. *IOSR Journal of Business and Management, 19*(6), 31–38. https://doi.org/10.9790/487X-1906053138.

Lutfi, A. (2023). Investigating the moderating effect of environment uncertainty on the relationship between institutional factors and ERP adoption among Jordanian SMEs. Journal of Open Innovation: Technology, Market, and Complexity, 6(3), 91–110. https://doi.org/10.3390/joitmc6030091.

Mell, P., & Grance, T. (2009). *On-demand self-service*. National Institute of Standards and Technology (NIST). http://www.nist.gov/itl/cloud/upload/cloud-On-demand-self-service.pdf.

Pargmann, J., Riebenbauer, E., Flick-Holtsch, D., & Berding, F. (2023). Digitalisation in accounting: A systematic literature review of activities and implications for competences. *Empirical Research in Vocational Education and Training, 15*, Article 6. https://doi.org/10.1186/s40461-023-00141-1.

Riady, Y., Sofwan, M., Mailizar, M., Alqahtani, T. M., Yaqin, L. N., & Habibi, A. (2024). How can we assess the success of information technologies in digital libraries? Empirical evidence from Indonesia. International Journal of Information Management Data Insights, 3(2), 100192. https://doi.org/10.1016/j.jjimei.2023.100192.

Roky, H., & Al Meriouh, Y. (2015). Evaluation by users of an industrial information system (XPPS) based on the DeLone and McLean model for IS success. *Procedia Economics and Finance*, *26*, 903–913. https://doi.org/10.1016/S2212-5671(15)00903-X.

Saad, M. (2023). The influence of accounting information system adoption on business performance amid COVID-19. Computers in Human Behavior Reports, 10, 100286. https://doi.org/10.1016/j.chbr.2023.100286.

Sabeh, H.N., Husin, M.H., Kee, D.M.H., Baharudin, A.S., Abdullah, R., 2021. A Systematic Review of the DeLone and McLean Model of Information Systems Success in an E-Learning Context (2010–2020). IEEE Access, 9, 81210–81235. https://doi.org/10.1109/ACCESS.2021.3084815.

Saltan, A., & Smolander, K. 2021. Bridging the state-of-the-art and the state-of-the-practice of SaaS pricing: A multivocal literature review. *Information and Software Technology,* 133. https://doi.org/10.1016/j.infsof.2021.106510.

Sastararuji, D., Hoonsopon, D., Pitchayadol, P., & Chiwamit, P. (2022). Cloud accounting adoption in small and medium enterprises: An integrated conceptual framework. In *Proceedings of the 11th International Conference on Information Communication and Management (ICICM 2021)* (pp. 32–38). Association for Computing Machinery. https://doi.org/10.1145/3447432.3447439.

Sofyan, S. (2017). Peran UMKM (usaha mikro, kecil, dan menengah) dalam perekonomian Indonesia. *Bilancia: Jurnal Studi Ilmu Syariah dan Hukum, 11*(1), 33–64. https://doi.org/10.24239/blc.v11i1.298.

Syahrani, T., & Pradesa, E. (2023). Peran Literasi Keuangan dan Inklusi Keuangan Dalam Meningkatkan Penggunaan Financial Technology Pada UMKM. *Ekonomi, Keuangan, Investasi Dan Syariah (EKUITAS)*, *4*(3), 1003-1010. https://doi.org/10.47065/ekuitas.v4i3.2985.

Wang, Y. S., & Liao, Y. W. (2008). Assessing eGovernment systems success: A validation of the DeLone and McLean model of information systems success. *Government Information Quarterly*, *25*(4), 717–733. https://doi.org/10.1016/j.giq.2007.06.002.

Wang, Y. S., Tseng, T. H., Wang, W. T., Shih, Y. W., & Chan, P. Y. (2019). Developing and validating a mobile catering app success model. *International Journal of Hospitality Management*, *77*, 19–30. https://doi.org/10.1016/j.ijhm.2018.06.002.