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(Research/Review) Article

Measuring the Success of Accounting Information Systems Using the DeLone and McLean Model: A Case Study of Cooperatives in Badung Regency

Ni Kadek Parissa Prawisanthi [1], Anak Agung Ngurah Agung Kresnandra [2]

[1] Faculty of Economics and Business, Udayana University; e-mail : parissa242@gmail.com
*Corresponding Author : Ni Kadek Parissa Prawisanthi

Abstract. This study empirically investigates the impact of information quality, system quality, and service quality on net benefits in cooperatives located in Badung Regency, specifically in Mengwi District. A quantitative research approach was employed, with non-probability sampling and purposive sampling as the chosen techniques. A total of 150 respondents, including cooperative managers and staff, participated in this study. Data analysis was performed using Structural Equation Modeling with Partial Least Squares (SEM-PLS) through SmartPLS 4.0 software. The study found that information quality significantly influences net benefits through system use and user satisfaction. High-quality information is critical for effective system use and leads to greater user satisfaction, which ultimately contributes to higher net benefits for the cooperatives. Similarly, system quality was also found to significantly affect net benefits, with the use of high-quality systems increasing system use and improving user satisfaction, further enhancing the net benefits received by the cooperatives. However, service quality did not show a significant direct impact on net benefits, nor did it have any significant effect through the mediating variables of system use and user satisfaction. This finding suggests that while service quality is important in many contexts, in the case of cooperatives in this study, the quality of the information and the system itself play a more prominent role in determining the net benefits. The results of this study emphasize the importance of focusing on improving information and system quality to maximize the net benefits in cooperatives. Cooperatives should prioritize investments in information technology systems and ensure that the information provided is accurate and relevant to enhance system use and user satisfaction. This, in turn, will lead to greater overall benefits for the cooperatives in Mengwi District, Badung Regency.

Keywords: Accounting Information Systems, DeLone and McLean Model, Information Quality, System Quality, User Satisfaction.

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1. INTRODUCTION

According to Law of the Republic of Indonesia Number 25 of 1992 concerning Cooperatives, a cooperative is a legal entity established by individuals or other cooperatives, which separates the assets of its members to be used as capital in running a business that fulfills shared economic, social, and cultural aspirations and needs, in line with cooperative values and principles. Cooperatives aim to improve the welfare of their members in particular and the community in general, serving as an integral part of a democratic and equitable national economy. Unlike conventional legal entities, cooperatives are characterized by their voluntary and open membership. The values that underpin cooperative activities include kinship, mutual assistance, responsibility, democracy, equality, fairness, and self-reliance.

Based on data from the Bali Provincial Cooperative Office in 2021, Badung Regency ranks third in terms of the number of cooperatives, following Denpasar City and Gianyar Regency.

The success of accounting information systems, proxied by net benefits, can be defined as the perceived impact of a system on both individual users and organizations (DeLone & McLean, 2003). In the context of cooperatives, net benefits may manifest as improvements in cooperative performance, employee effectiveness in completing tasks, as well as the accountability and transparency of the financial reports or information produced. These benefits are more likely to be realized when users frequently operate the system, enhancing their proficiency and effectiveness in carrying out their responsibilities. As users become more proficient, their satisfaction increases, potentially motivating them to contribute more meaningfully to the organization—thus reinforcing the net benefits of the system.

Given the important role of accounting information systems in organizations such as cooperatives, evaluating the success of such systems is crucial. The Information System Success Model developed by William H. DeLone and Ephraim R. McLean in 1992 provides a widely accepted framework for measuring system success. The model includes several key dimensions: information quality, system quality, and service quality, which are believed to contribute to achieving net benefits.

DeLone and McLean propose that net benefits can be achieved when information quality, system quality, and service quality are met. However, prior studies have shown inconsistent results regarding the direct influence of these three dimensions on net benefits. For instance, research by Usman et al. (2024) indicates that system quality and information quality do not have a direct effect on net benefits. This finding is consistent with the study by Hari Laksono (2017), which concluded that system quality—defined in terms of reliability, data accuracy, response time, ease of use, and integration—does not significantly affect net benefits. Laksono also noted that information quality—relating to accuracy, timeliness, usefulness, comprehensibility, and completeness—does not have a direct impact on net benefits.

Similarly, a study by Ardiansyah et al. (2024) found that both system and information quality do not directly influence net benefits. These results align with findings from Hartiwi and Rokhayati (2023) and Syahfitri et al. (2022), who also observed that system and information quality do not significantly affect net benefits..

Due to these inconsistencies between empirical findings and the DeLone and McLean model, it is assumed that mediating variables may be necessary to explain how information quality, system quality, and service quality influence net benefits. Consequently, this study introduces two mediating (intervening) variables: system use and user satisfaction. System use refers to the frequency and duration of system usage by users (DeLone & McLean, 2003), reflecting user behavior in utilizing the system for operational activities. User satisfaction, on the other hand, represents the user's response to the perceived benefits gained from using the information system (DeLone & McLean, 2003).

Numerous studies have employed the DeLone and McLean model to measure the success of information systems. Several of these have reported consistent findings indicating that user satisfaction positively influences system use and net benefits—for example, the studies by Al-Zahrani (2020), Sorongan and Hidayati (2020), and Alzahrani et al. (2019).

However, other studies have produced contradictory results regarding the relationships among the model's variables. For instance, Bradford et al. (2020) and Rahayu et al. (2018) found that system quality does not influence user satisfaction or system use. Similarly, studies by Kurnianti et al. (2019), Veeramootoo et al. (2018), and Rahayu et al. (2018) reported that information quality does not significantly affect system use or user satisfaction.

Additional inconsistencies have emerged in studies by Rahayu et al. (2018), which found that service quality does not influence system use or user satisfaction. Sorongan and Hidayati (2020) also reported that system use has no significant impact on net benefits.

This study is based on prior research by Al-Okaily et al. (2020), Sorongan and Hidayati (2019), and Hari Laksono (2017), which explored the DeLone and McLean Information System Success Model. However, these previous studies did not incorporate mediating variables. The primary distinction of the present research lies in the inclusion of two mediating variables—system use and user satisfaction—to strengthen the influence of information quality, system quality, and service quality on net benefits.

Given the inconsistent findings surrounding the DeLone and McLean model, further investigation is warranted to better understand the factors influencing the success of accounting information systems. Based on the background, observed phenomena, and gaps between theory and empirical findings, this study seeks to explore the topic through the research entitled: "Measuring the Success of Accounting Information Systems Using the DeLone and McLean Approach in Cooperatives of Badung Regency."

2. METHOD

This study examines the success of implementing Accounting Information Systems (AIS) in cooperatives in Badung Regency by applying the DeLone and McLean (2003) Information System Success Model. The model evaluates system success based on six core dimensions: information quality, system quality, service quality, system use, user satisfaction, and net benefits. The research was conducted in cooperatives located in Mengwi District, where various issues such as fund misappropriation and human errors have been reported factors that have negatively impacted the quality of financial information. Employing both quantitative and qualitative approaches, data were collected through questionnaires, interviews, and direct observations involving cooperative employees who have been using the AIS for at least one year. Respondents were selected using purposive sampling to ensure they had direct experience with the system. Data were analyzed using Structural Equation Modeling Partial Least Squares (SEM-PLS) with SmartPLS 4.0, to test the relationships among variables affecting the net benefits derived from system use (DeLone & McLean, 2003; Sugiyono, 2018).

For data collection, a five-point Likert-scale questionnaire was utilized to assess indicators for each variable. Information quality was measured using indicators such as accuracy, relevance, timeliness, and completeness. System and service quality were assessed based on reliability, flexibility, empathy, and responsiveness of service providers. The mediating variables system use and user satisfaction play a crucial role in bridging the relationship between system quality and net benefits. The outer model was evaluated through tests of convergent validity, discriminant validity, and construct reliability, while the inner model assessed the strength of relationships among latent variables using R-square values and path coefficients. The model fit was further evaluated using indices such as Standardized Root Mean Square Residual (SRMR), Normed Fit Index (NFI), and Q^2 predictive relevance to ensure the accuracy and relevance of the constructed model (Hari Laksono, 2017; Hartiwi & Rokhayati, 2023).).

Finally, hypothesis testing was conducted using the bootstrapping method to assess the significance of relationships among variables based on t-statistics and p-values. Hypotheses were accepted if the p-value was less than 0.05, indicating a statistically significant relationship between the studied variables. The findings are expected to provide empirical contributions toward enhancing the effectiveness of accounting information systems within cooperatives, particularly in improving financial accountability and transparency. Moreover, the results offer practical insights for cooperative managers in optimizing the use of AIS to achieve maximum net benefits (Ghozali, 2008; Syahfitri et al., 2022).

3. RESULTS AND DISCUSSION

Analysis Results

Descriptive Statitics

Table 1. Descriptive Statistics Results

Variabel	N	Minimum	Maximum	Mean	Std. Deviation
Information Quality	150	4,00	20,00	16,73	2,52
System Quality	150	5,00	20,00	16,34	2,33
Service Quality	150	3,00	15,00	11,67	2,22
System Use	150	5,00	15,00	11,40	1,79
User Satisfaction	150	3,00	15,00	12,46	1,79
Net Benefits	150	3,00	15,00	12,71	1,91
Valid N (*listwise*)	150				

Source: Primary Data Processed, 2025

The descriptive statistical results are summarized as follows:

a) Information Quality (X1)

The variable information quality (X1) has a minimum value of 4.00 and a maximum value of 20.00. The mean value is 16.73 with a standard deviation of 2.52. The standard deviation being lower than the mean indicates a low level of data dispersion, suggesting that the responses are relatively homogeneous with low variability.

b) System Quality (X2)
The service quality (X3) variable has a minimum value of 5.00 and a maximum of 20.00. The mean score is 16.34 with a standard deviation of 2.33. The smaller standard deviation relative to the mean suggests a narrow data spread, indicating that respondents provided fairly consistent evaluations and showed relatively uniform perceptions of service quality.

c) Service Quality (X3)
The service quality (X3) variable has a minimum value of 3.00 and a maximum of 15.00. The mean score is 11.67 with a standard deviation of 2.22. The smaller standard deviation relative to the mean suggests a narrow data spread, indicating that respondents provided fairly consistent evaluations and showed relatively uniform perceptions of service quality.

d) System Use (Z1)
The system use (Z1) variable ranges from 5.00 to 15.00, with a mean value of 11.40 and a standard deviation of 1.79. The low standard deviation compared to the mean suggests limited variability in responses, implying a high degree of consistency among respondents in their frequency of system usage.

e) User Satisfaction (Z2)
The user satisfaction (Z2) variable has a minimum value of 3.00 and a maximum of 15.00. The mean is 12.46, with a standard deviation of 1.79. The relatively low standard deviation indicates that the distribution of satisfaction levels is tight, suggesting that most users share a similar level of satisfaction with the accounting information system.

f) Net Benefits (Y)
The net benefits (Y) variable ranges from 3.00 to 15.00, with a mean of 12.71 and a standard deviation of 1.91. The lower standard deviation compared to the mean suggests a consistent response pattern among users regarding the perceived benefits of the system. This indicates that most respondents experience positive outcomes and provide favorable assessments of the accounting information system in use.

Measurement Model Evaluation (Outer Model)

The evaluation of the measurement model (outer model) focuses on the relationship between latent variables and their respective indicators. This process is essential to confirm the validity and reliability of the measurement instruments. The evaluation involves both validity testing and reliability testing. Validity testing ensures that the data used are valid, while reliability testing assesses whether the questionnaire consistently and accurately measures the intended research variables.

A. Validity Testing

a. Convergent Validity
Convergent validity testing aims to determine the degree to which each indicator correlates with its associated latent construct. Two key criteria are used in this evaluation: loading factor values and Average Variance Extracted (AVE).

b. Loading Factor Values
An indicator is considered valid if its loading factor exceeds 0.70. However, a loading factor of 0.60 is also deemed acceptable in certain cases. If any indicator fails to meet this threshold, it must be removed, and the model must be re-evaluated until all indicators meet the validity criteria. The following presents the outer loading values after data processing:

Table 2. Results of Outer Loading Test – Stage 1

Indicator	KI	KS	KL	P	KP	MB	Decriptions
X1.1	0,919						Valid
X1.2	0,914						Valid
X1.3	0,912						Valid

X1.4	0,925						Valid
X2.1		0,871					Valid
X2.2		0,873					Valid
X2.3		0,571					Invalid
X2.4		0,928					Valid
X3.1			0,842				Valid
X3.2			0,939				Valid
X3.3			0,910				Valid
Z1.1				0,930			Valid
Z1.2				0,249			Invalid
Z1.3				0,811			Valid
Z2.1					0,927		Valid
Z2.2					0,928		Valid
Z2.3					0,914		Valid
Y1.1						0,930	Valid
Y1.2						0,927	Valid
Y1.3						0,926	Valid

Source: Primary Data Processed, 2025

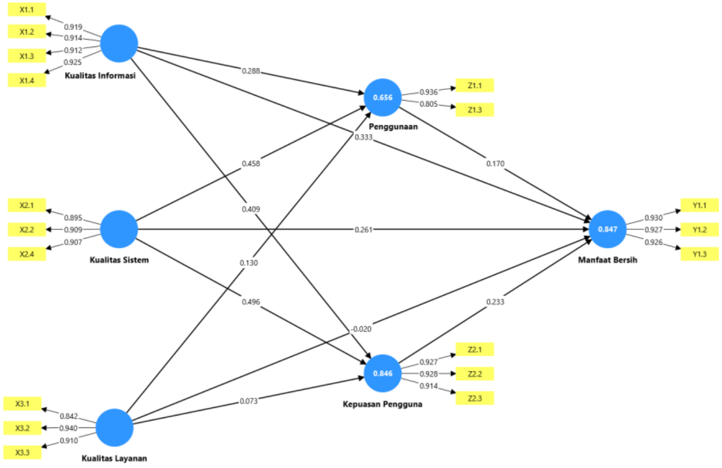
One item under the system quality variable showed a loading factor value of 0.571, while one item under the system use variable had a loading factor of 0.249. Since both values are below the recommended threshold of 0.70, these indicators were removed from the model and a re-assessment of the outer loading was conducted.

Table 3. Results of Outer Loading Test – Stage 2

Indikator	KI	KS	KL	P	KP	MB	Keterangan
X1.1	0,919						Valid
X1.2	0,914						Valid
X1.3	0,912						Valid
X1.4	0,925						Valid
X2.1		0,895					Valid
X2.2		0,909					Valid
X2.4		0,907					Valid
X3.1			0,842				Valid
X3.2			0,940				Valid
X3.3			0,910				Valid
Y1.1				0,936			Valid
Y1.2				0,805			Valid
Y1.3					0,927		Valid
Z1.1					0,928		Valid
Z1.3					0,914		Valid
Z2.1						0,930	Valid
Z2.2						0,927	Valid
Z2.3						0,926	Valid

Source: Primary Data Processed, 2025

In the second round of outer loading analysis, all remaining items under the variables of information quality, system quality, service quality, system use, user satisfaction, and net benefits exhibited loading factor values greater than 0.70. This confirms that all measurement items are valid and successfully measure the correlation between the indicators and their respective latent constructs. The updated measurement model based on the second outer loading test is presented below.



Source: Primary Data Processed, 2025

Figure 1. Outer Loading Model – Stage 2

c. Average Variance Extracted (AVE)

AVE is an additional metric used to assess the convergent validity of a latent construct. A construct is considered valid if its AVE value exceeds 0.50. The results of the AVE analysis are presented in the following table:

Table 4. AVE Value (Average Variance Extracted)

Variables	*Average Variance Extracted* (AVE)	Keterangan
User Satisfication	0,852	Valid
Information Quality	0,842	Valid
Service Quality	0,806	Valid
System Quality	0,817	Valid
Net Benefit	0,861	Valid
Usage	0,762	Valid

Source: Primary Data Processed, 2025

Based on the table above, it can be seen that the AVE (Average Variance Extracted) values for each variable are as follows: user satisfaction = 0.852, information quality = 0.842, service quality = 0.806, system quality = 0.817, net benefits = 0.861, and usage = 0.762. Since all AVE values exceed the threshold of 0.50, it can be concluded that each construct demonstrates acceptable convergent validity and is therefore considered valid.

d. Discriminant Validity

This test aims to ensure that the latent constructs within the measurement model are distinct from one another. Discriminant validity can be assessed using one of three criteria: cross loading values, the Fornell-Larcker criterion, and latent variable correlations.

a) Cross Loading Factor

An indicator is considered valid if its correlation (cross loading value) with its corresponding construct is higher than its correlations with other constructs. The following presents the results of the discriminant validity test based on cross loading values.

Table 5. cross loading value

Indicators	User Satisficaton	Information Quality	Service Quality	System Quality	Net Benefits	Usage
Z2.1	0,927	0,804	0,572	0,840	0,820	0,710
Z2.2	0,928	0,816	0,633	0,798	0,815	0,750
Z2.3	0,915	0,809	0,582	0,821	0,796	0,723
X1.1	0,764	0,919	0,572	0,765	0,805	0,683
X1.2	0,796	0,914	0,598	0,753	0,830	0,687
X1.3	0,830	0,912	0,629	0,808	0,789	0,714
X1.4	0,829	0,925	0,584	0,793	0,789	0,711
X3.1	0,494	0,523	0,842	0,480	0,477	0,428
X3.2	0,571	0,607	0,940	0,539	0,546	0,546
X3.3	0,655	0,612	0,910	0,631	0,606	0,620
X2.1	0,760	0,717	0,517	0,895	0,753	0,684
X2.2	0,827	0,792	0,585	0,909	0,833	0,737
X2.4	0,819	0,793	0,572	0,907	0,774	0,701
Y1.1	0,838	0,824	0,549	0,819	0,930	0,749
Y1.2	0,795	0,793	0,544	0,792	0,927	0,682
Y1.3	0,809	0,819	0,604	0,813	0,926	0,791
Z1.1	0,830	0,805	0,593	0,821	0,836	0,936
Z1.3	0,478	0,458	0,431	0,483	0,495	0,805

Source: Primary Data Processed, 2025

Based on the table above, it can be observed that the cross loading values for each indicator are higher with their respective constructs than with other constructs. This indicates good discriminant validity, as the indicators effectively differentiate between constructs. Therefore, it can be concluded that all indicators used in the model are valid and meet the requirements of discriminant validity.

b) Latent Variable Correlation

Latent Variable Correlation analysis is conducted to assess the strength of relationships between constructs in the model. The following are the results of the latent variable correlation test.

Table 6. Latent Variable Correlation Value

Variabel	KP	KI	KL	KS	MB	P	AVE	√AVE
User Satisfication	1,000	0,878	0,645	0,888	0,878	0,788	0,852	0,923
Information Quality	0,878	1,000	0,650	0,850	0,875	0,762	0,842	0,918
Service Quality	0,645	0,650	1,000	0,619	0,610	0,600	0,806	0,898
System Quality	0,888	0,850	0,619	1,000	0,871	0,783	0,817	0,904
Net Benefit	0,878	0,875	0,610	0,871	1,000	0,799	0,861	0,928
Usage	0,788	0,762	0,600	0,783	0,799	1,000	0,762	0,873

Source: Primary Data Processed, 2025

The results indicate that the construct of user satisfaction has a √AVE (square root of Average Variance Extracted) value of 0.923. The correlations between this construct and other constructs in the model are 0.878, 0.645, 0.888, 0.878, and 0.788. Since all correlation values are lower than the √AVE (0.923), it can be concluded that the user satisfaction construct demonstrates good discriminant validity.

Similarly, the information quality construct has a √AVE of 0.918. The correlation values between this construct and the others in the model are 0.878, 0.650, 0.850, 0.875, and 0.762. As these values are all below the √AVE (0.918), the information quality construct can also be considered to have satisfactory discriminant validity.

For the service quality construct, the √AVE is 0.898. Its correlations with the other constructs are 0.645, 0.650, 0.619, 0.610, and 0.600. All values are significantly lower than the √AVE, supporting the conclusion that this construct meets the criteria for discriminant validity.

Next, the system quality construct has a √AVE value of 0.904. Correlation values with other constructs are 0.888, 0.850, 0.619, 0.871, and 0.783. As these correlations are below the √AVE, the system quality construct is confirmed to have discriminant validity.

The net benefits construct has a √AVE of 0.928, which is higher than its correlations with other constructs, namely 0.878, 0.875, 0.610, 0.871, and 0.799. Since all correlations fall below the √AVE, the net benefits construct can be considered discriminantly valid.

Lastly, the usage construct has a √AVE value of 0.873, which exceeds its correlations with other constructs: 0.788, 0.762, 0.600, 0.783, and 0.799. Thus, this construct also meets the requirements for discriminant validity.

e. Fornell Larcker

The Fornell-Larcker criterion is effectively employed to examine whether the constructs in the model possess adequate discriminant validity. The results of the Fornell-Larcker test are presented below.

Table 7. Fornell Larcker Value

Variabel	KP	KI	KL	KS	MB	P
User Satisfication	0,923					
Information Quality	0,878	0,918				
Service Quality	0,645	0,650	0,898			
System Quality	0,888	0,850	0,619	0,904		
Net Benefit	0,878	0,875	0,610	0,871	0,928	
Usage	0,788	0,762	0,600	0,783	0,799	0,873

Source: Primary Data Processed, 2025

Based on the results of the analysis above, the √AVE value for the user satisfaction construct is 0.923, which is the highest value in the respective row. The correlations between this construct and others are as follows: information quality (0.878), service quality (0.645), system quality (0.888), net benefits (0.878), and usage (0.788). Since all these correlation values are lower than the √AVE, it can be concluded that the user satisfaction construct exhibits strong discriminant validity.

The information quality construct has a √AVE value of 0.918, which is higher than its correlations with user satisfaction (0.878), service quality (0.650), system quality (0.850), net benefits (0.875), and usage (0.762). These results indicate that the information quality construct also meets the criteria for discriminant validity.

For the service quality construct, the √AVE is 0.898. Its correlations with other constructs are user satisfaction (0.645), information quality (0.650), system quality (0.619), net benefits (0.610), and usage (0.600). Since all these values are lower than the √AVE, it can be concluded that the service quality construct demonstrates acceptable discriminant validity

The system quality construct has a √AVE of 0.904. Correlation values with other constructs include user satisfaction (0.888), information quality (0.850), service quality (0.619), net benefits (0.871), and usage (0.783). As all these correlations are below the √AVE, the system quality construct is confirmed to have good discriminant validity.

The net benefits construct shows a √AVE value of 0.928, which exceeds all correlations with other constructs: user satisfaction (0.878), information quality (0.875), service quality (0.610), system quality (0.871), and usage (0.799). This finding supports the conclusion that the net benefits construct exhibits strong discriminant validity.

Finally, the usage construct has a √AVE of 0.873. Its correlations with other constructs are user satisfaction (0.788), information quality (0.762), service quality (0.600), system quality (0.783), and net benefits (0.799). Since all correlation values are below the √AVE, it can be concluded that the usage construct also satisfies the requirements for discriminant validity.

B. Reliability Testing

Table 8. Cronbach's Alpha dan Composite Reliability Value

Variables	*Cronbach's Alpha*	*Composite Reliability (rho_c)*
User Satisfication	0,913	0,945
Information Quality	0,937	0,955
Service Quality	0,880	0,926
System Quality	0,888	0,930
Net Benefit	0,919	0,949
Usage	0,704	0,864

Source: Primary Data Processed, 2025

The following table presents the values of Cronbach's alpha and Composite Reliability. Based on the analysis, all constructs in the study show Cronbach's alpha and Composite Reliability values greater than 0.70. Therefore, it can be concluded that the questionnaire used in this research possesses a high level of reliability.

a. Model Fit Assessment

The model fit assessment was conducted by comparing the output estimates generated by SmartPLS version 4.0 with established fit criteria.

Table 9. Model Fit Assasesment Results

Parameters	*Rale of Thumb*	Parameters Value	Descriptions
SRMR	Lebih kecil dari 0,10	0,064	Fit
d_ULS	> 0,50	0,693	Fit
d_G	> 0,50	0,515	Fit
Chi-square	X^2 statistik ≥ x^2 tabel	436,357 ≥ 27,587	Fit
NFI	Mendekati nilai 1	0,800	Fit
GoF	0,1 (GoF small), 0,25 (GoF moderate), 0,36 (GoF strong)	0,797	Fit
Q^2 *Predictive Relevance*	Q^2 > 0: has *predictive relevance* Q^2 < 0: has weak *predictive relevance* 00,02 (weak), 0,15 (moderate), 0,35 (Strong)	Q^2 User Satisfication 0,843 > 0 Q^2 Net Benefit 0,825 > 0 Q^2 Usage 0,637 > 0	Fit

Source: Primary Data Processed, 2025

In this study, the goodness-of-fit of the model was evaluated using several statistical parameters. The results are as follows:

a) The Standardized Root Mean Square Residual (SRMR) value was 0.064, which is below the recommended threshold of 0.10. This indicates a good fit between the theoretical model and the empirical data, suggesting that the model is acceptable.

b) The d_ULS and d_G values were 0.693 and 0.515, respectively—both exceeding the minimum threshold of 0.50. These results indicate that the model demonstrates adequate structural consistency and can therefore be considered a good fit.

c) A further evaluation using the Chi-square statistic yielded a value of 436.357, which is significantly higher than the critical table value of 27.587. This suggests that the model significantly corresponds with the sample data and falls within the category of a well-fitting model.

d) The Normed Fit Index (NFI) was reported at 0.800, approaching the ideal value of 1. This further supports the conclusion that the model has an acceptable level of goodness-of-fit.

e) The Goodness of Fit (GoF) index was calculated at 0.797, well above the threshold of 0.36. This indicates a very strong model fit and classifies the model in the "strong GoF" category, suggesting that the model effectively captures the relationships between the latent variables under investigation.

f) Uji The Q^2 Predictive Relevance test produced significant values for the three endogenous constructs: user satisfaction ($Q^2 = 0.843 > 0$), net benefits ($Q^2 = 0.825 > 0$), and usage ($Q^2 = 0.637 > 0$). All Q^2 values are not only greater than zero but also exceed the 0.35 benchmark, indicating that the model possesses strong predictive relevance.

Structural Model Analysis (Inner Model)

Table 10. R-square Value

Variables	R-*square*	R-*square adjusted*
User Satisfication	0,846	0,843
Net Benefit	0,847	0,842
Use	0,656	0,649

Source: Primary Data Processed, 2025

Based on the analysis, the adjusted R^2 value for user satisfaction is 0.843, indicating that 84.3% of the variance in this variable can be explained by the independent variables included in the model. The remaining 15.7% is attributed to other factors outside the model. Therefore, the relationship between the independent variables and user satisfaction is considered strong.

Meanwhile, the adjusted R^2 value for net benefits is 0.842, indicating that 84.2% of the variance in this variable is explained by the independent variables within the model, while the remaining 15,8% is influenced by external factors. This suggests that the relationship between the independent variables and net benefits is considered strong.

Furthermore, the adjusted R^2 value for usage is 0.649, meaning that 64.9% of the variance in system usage can be explained by the model's independent variables. The remaining 35.1% is determined by variables not included in the model. Thus, the relationship between the independent variables and system usage is also considered strong.

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C. Hypothesis Testing

Hypothesis testing (significance testing) in this study was performed using the bootstrapping technique. The results of the bootstrapping procedure are presented in terms of t-statistics and p-values. A relationship between variables is considered statistically significant if the t-statistic > 1.96 or the p-value < 0.05. The following are the bootstrapping results for both direct and indirect effects:

Bootstrapping Results – Direct Effects

Table 11. Bootstrapping Results (Direct Effect)

Direct Effects	*Original Sample* (O)	*Sample Mean* (M)	*Standard Deviation* (STDEV)	T *statistics* (|O/STDEV|)	P *values*
User satisfaction -> Net benefits	0,233	0,229	0,110	2,109	0,017
Information quality -> User satisfaction	0,409	0,408	0,093	4,382	0,000
Information quality -> Net benefits	0,333	0,339	0,101	3,310	0,000
Information quality -> Usage	0,288	0,277	0,117	2,464	0,007
Service quality -> User satisfaction	0,073	0,073	0,066	1,110	0,133
Service quality -> Net benefits	-0,020	-0,018	0,041	0,480	0,316
Service quality -> Usage	0,130	0,140	0,080	1,622	0,052
System quality -> User satisfaction	0,496	0,493	0,091	5,469	0,000
System quality -> Net benefits	0,261	0,251	0,095	2,751	0,003
System quality -> Usage	0,458	0,457	0,106	4,341	0,000
Usage -> Net benefits	0,170	0,173	0,066	2,558	0,005

Source: Primary Data Processed, 2025

a) Effect of User Satisfaction on Net Benefits

The results indicate that user satisfaction has a positive and significant effect on net benefits, as evidenced by a coefficient of 0.233, a t-statistic of 2.109 (> 1.96), and a p-value of 0.017 (< 0.05).

b) Effect of Information Quality on User Satisfaction

Based on the analysis, information quality has a positive and significant effect on user satisfaction. This is supported by a coefficient of 0.409, a t-statistic of 4.382, and a p-value of 0.000 (< 0.05).

c) Effect of Information Quality on Net Benefits

The relationship between information quality and net benefits is also positive and statistically significant, with a coefficient of 0.333, a t-statistic of 3.310, and a p-value of 0.000 (< 0.05).

d) Effect of Information Quality on Usage

The analysis reveals that information quality has a positive and significant effect on system usage, with a coefficient of 0.288, a t-statistic of 2.464, and a p-value of 0.007 (< 0.05).

e) Effect of Service Quality on User Satisfaction

Service quality exhibits a positive but not significant relationship with user satisfaction. This is indicated by a coefficient of 0.073, a t-statistic of 1.110 (< 1.96), and a p-value of 0.133 (> 0.05), suggesting that the effect is not statistically significant.

f) Effect of Service Quality on Net Benefits

The analysis shows that service quality does not significantly affect net benefits. This is evidenced by a negative coefficient of -0.020, a t-statistic of 0.480 (< 1.96), and a p-value of 0.316 (> 0.05).

g) Effect of Service Quality on Usage

Although service quality shows a positive relationship with usage, this effect is not statistically significant, with a coefficient of 0.130, a t-statistic of 1.622 (< 1.96), and a p-value of 0.052 (> 0.05), indicating a weak and non-significant influence.

h) Effect of System Quality on User Satisfaction

The analysis confirms that system quality has a strong, positive, and significant effect on user satisfaction, as shown by a coefficient of 0.496, a t-statistic of 5.469, and a p-value of 0.000 (< 0.05).

i) Effect of System Quality on Net Benefits

System quality also positively and significantly affects net benefits, with a coefficient of 0.261, a t-statistic of 2.751, and a p-value of 0.003 (< 0.05).

j) Effect of System Quality on Usage

The results demonstrate that system quality has a positive and significant effect on system usage, with a coefficient of 0.458, a t-statistic of 4.341, and a p-value of 0.000 (< 0.05).

k) Effect of Usage on Net Benefits

The effect of usage on net benefits is positive and statistically significant, supported by a coefficient of 0.170, a t-statistic of 2.558, and a p-value of 0.005 (< 0.05).

Bootstrapping Results of Indirect Effect

Table 12. Bootstrapping Results of Indirect Effects

Indirect Effects	*Original Sample* (O)	*Sample Mean* (M)	*Standard Deviation* (STDEV)	T *Statistics* (|O/STDEV|)	P *Values*	Desc.
Service quality-> Usage -> Net benefits	0,022	0,024	0,017	1,304	0,096	H0 accept Ha reject
Information quality-> Usage -> Net benefits	0,078	0,080	0,039	2,015	0,022	H0 reject Ha accept
Information quality-> User satisfaction-> Net benefits	0,095	0,090	0,044	2,157	0,016	H0 reject Ha accept
Service quality -> User satisfaction -> Net benefits	0,017	0,016	0,017	1,000	0,159	H0 accept Ha reject
System quality -> User satisfaction -> Net benefits	0,116	0,117	0,068	1,701	0,044	H0 reject Ha accept
Information quality -> Usage -> Net benefits	0,049	0,046	0,025	1,930	0,027	H0 reject Ha accept

Source: Primary Data Processed, 2025

Discussion of Research Findings

Usage Mediates the Relationship between Information Quality and Net Benefits

Hypothesis 1 posits that usage mediates the relationship between information quality and net benefits. Based on the data in Table 12, it is evident that information quality has a significant indirect effect on net benefits through usage. This is confirmed by a coefficient of 0.049, a t-statistic of 1.930, and a p-value of 0.027. Hence, H0 is rejected, and Ha is accepted. In this case, usage acts as a partial mediator, where there is also a significant direct relationship between information quality and net benefits. This means that usage strengthens the influence of information quality on net benefits.

These findings support the Information System Success Model proposed by DeLone and McLean (2003), which suggests that information quality can influence usage, which, in turn, leads to net benefits experienced by both users and organizations. High-quality information reflects the accuracy and relevance of the information produced. Information that is complete, consistent, and presented in a timely manner encourages users to actively engage with the information system to support and complete their tasks. An increase in the usage of the information system will consequently enhance the net benefits perceived by users and organizations. Therefore, information quality not only provides direct benefits but also delivers indirect benefits through increased system usage.

These results align with the findings of Hakim and Misra (2024), who reported that information quality significantly influences net benefits through usage as a mediating variable. This suggests that the better the quality of the provided information system, the more consistently the system is used, which ultimately increases the net benefits perceived by both users and organizations.

Usage Mediates the Relationship between System Quality and Net Benefits

Hypothesis 2 states that usage mediates the relationship between system quality and net benefits. According to the analysis in Table 12, it is evident that usage plays an important role as a mediating variable in the relationship between system quality and net benefits. This is shown by a coefficient of 0.078, a t-statistic of 2.015, and a p-value of 0.022. Since the t-statistic exceeds 1.96 and the p-value is less than 0.05, it can be concluded that the indirect effect of system quality on net benefits through usage is statistically significant. Thus, H0 is rejected, and Ha is accepted. In this context, usage acts as partial mediation, as the direct relationship between system quality and net benefits is also significant. This indicates that usage enhances the impact of system quality on net benefits.

This finding supports the Information System Success Model proposed by DeLone and McLean (2003), which asserts that system quality affects usage, which ultimately leads to net benefits perceived by both individuals and organizations. System quality serves as a crucial indicator of how reliable, user-friendly, functional, flexible, and well-integrated the information system is. With a high-quality system, users are motivated to consistently use the system to complete their tasks. System quality drives the increased use of the information system, which eventually impacts the net benefits perceived by users and organizations, such as individual performance, effectiveness, accountability, transparency of information, and enhanced organizational performance.

The results of this study are consistent with the research conducted by Al-Zahrani (2020), who found that usage of the information system has a significant impact on net benefits. Effective usage of the information system will certainly lead to greater net benefits. The more consistently and optimally the information system is used, the greater the net benefits perceived by both its users and the organization.

Usage Mediates the Relationship between Service Quality and Net Benefits

Hypothesis 3 posits that usage can mediate the relationship between service quality and net benefits. However, based on the results of the structural model testing, usage does not mediate the relationship between service quality and net benefits. This is evidenced by a coefficient of 0.022, a t-statistic of 1.304 (< 1.96), and a p-value of 0.096 (> 0.05). Therefore, it can be concluded that the indirect effect of service quality on net benefits through usage is not statistically significant. Thus, it can be stated that H0 is accepted and Ha is rejected. This indicates that there is no mediation (no mediation) because both the direct and indirect relationships are insignificant.

These findings are inconsistent with the Information System Success Model proposed by DeLone and McLean (2003), which suggests that service quality—including assurance, empathy, and responsiveness—can serve as a driving factor that increases system usage, which ultimately leads to net benefits for individuals and organizations. However, in this context, the study's findings show that both the direct and indirect effects of service quality on net benefits through system usage are not statistically significant. This suggests that, in practice, service quality has not provided a meaningful contribution in encouraging system usage or creating net benefits that users can perceive.

These findings are not in line with previous research conducted by Ardiansyah et al. (2024), which indicated that usage mediates the relationship between service quality and net benefits. However, the study by Masunga et al. (2020) suggested that usage has a significant effect on net benefits.

User Satisfaction Mediates the Relationship between Information Quality and Net Benefits

Hypothesis 4 posits that user satisfaction can mediate the relationship between information quality and net benefits. Based on the analysis in Table 12, the effect of information quality on net benefits through user satisfaction has a coefficient of 0.095, a t-statistic of 2.157, and a p-value of 0.016. Since the t-statistic is greater than 1.96 and the p-value is below the 0.05 threshold, it can be concluded that the effect of information quality on net benefits through user satisfaction is statistically significant. Therefore, it can be stated that H0 is rejected and Ha is accepted. Furthermore, the analysis shows that user satisfaction serves as a partial mediator, meaning that information quality can influence net benefits both directly and indirectly through user satisfaction.

This result aligns with the Information System Success Model proposed by DeLone and McLean (2003), which suggests that information quality is a variable used to measure the success of an information system in delivering the information needed by its users. Information quality will directly impact user satisfaction and can indirectly influence the net benefits of the system. In this study's context, the analysis shows that information quality can influence net benefits both directly and indirectly through user satisfaction. User satisfaction, which includes user contentment with the system's features and the information produced, acts as a mediating variable that strengthens the relationship between information quality and net benefits. When users are satisfied with the available information, they are more likely to use the information system consistently, which ultimately enhances the net benefits perceived by both users and organizations.

The findings of this study are consistent with the research conducted by Rachmadi and Handaka (2019), which stated that information quality significantly influences net benefits through user satisfaction as a mediating variable. This suggests that the better the quality of information provided, the greater the satisfaction it generates among users, which ultimately increases the net benefits experienced.

User Satisfaction Mediates the Relationship between System Quality and Net Benefits

Hypothesis 5 posits that user satisfaction can mediate the relationship between system quality and net benefits. Based on the analysis, it was found that the effect of system quality on net benefits through user satisfaction has a coefficient of 0.016, a t-statistic of 1.701, and a p-value of 0.044. Since the p-value is below 0.05 and the t-statistic is close to the critical value (although slightly below 1.96), it can be concluded that user satisfaction can mediate the relationship between system quality and net benefits. Therefore, H0 is rejected, and Ha is accepted. Additionally, it is known that the direct path between system quality and net benefits is also statistically significant, indicating that the type of mediation occurring here is partial mediation.

These findings align with the Information System Success Model proposed by DeLone and McLean (2003), which states that system quality is one of the key dimensions in determining the success of an information system by measuring how well a system processes the information required by users. Theoretically, high system quality will encourage users to use the system over the long term and will form a positive perception of the system, leading to user satisfaction. This satisfaction can, in turn, strengthen the relationship between system quality and net benefits. The results of this study show that the relationship between system quality and net benefits, both directly and indirectly through user satisfaction, is positive and significant. User satisfaction is formed when users are satisfied with the information system they are using. When users feel satisfied, they are motivated to engage more actively, use the system consistently and optimally, and integrate the system into their work processes. This will undoubtedly generate net benefits for both individuals and organizations.

The findings of this study are consistent with previous research by Syahfitri et al. (2022), which found that user satisfaction can mediate the relationship between system quality and net benefits. The better the system quality, the more satisfied the users will be, leading to consistent usage and the realization of the net benefits from the information system.

User Satisfaction Mediates the Relationship between Service Quality and Net Benefits

Hypothesis six posits that user satisfaction can mediate the relationship between service quality and net benefits. Based on the results of the structural model testing, the indirect effect of service quality on net benefits through user satisfaction yielded a coefficient of 0.017, a t-statistic of 1.000, and a p-value of 0.159. Since the t-statistic is below 1.96 and the p-value exceeds 0.05, it can be concluded that the indirect effect is not statistically significant. Therefore, H0 is accepted and Ha is rejected, indicating that no mediation exists, as both the direct and indirect effects are not statistically significant. In other words, user satisfaction does not mediate the relationship between service quality and net benefits.

These findings are not consistent with the Information System Success Model proposed by DeLone and McLean (2003), which suggests that service quality—as support provided by information system departments, organizational units, or external service providers—can influence system usage and user satisfaction, ultimately impacting net benefits. Service quality encompasses elements such as assurance (minimizing errors and ensuring data security), empathy (addressing user needs), and responsiveness (promptly addressing user issues). Theoretically, such support should enhance user satisfaction and, in turn, contribute to the realization of net benefits. However, in this study, neither the direct nor the indirect effects of service quality on net benefits were statistically significant. This suggests that service quality has not yet contributed meaningfully to either increasing usage or fostering perceived net benefits via user satisfaction.

These results also contrast with previous findings by Syahfitri et al. (2022), who found that user satisfaction partially mediated the relationship between service quality and net benefits. They concluded that better service quality provided by the information system correlates with greater benefits for both users and organizations.

4. CONCLUSION

This study aimed to empirically examine the influence of information quality, system quality, and service quality on net benefits, with usage and user satisfaction as mediating variables, based on the Information System Success Model developed by DeLone and McLean (2003). Based on the results discussed in the previous sections, the following conclusions can be drawn:

a) Usage mediates the relationship between information quality and net benefits. As a mediating variable, usage has a statistically significant positive effect in strengthening the link between information quality and net benefits in cooperatives in Badung Regency, particularly in Mengwi District.

b) Usage mediates the relationship between system quality and net benefits. Usage has a statistically significant positive mediating effect between system quality and net benefits in cooperatives in Badung Regency, particularly in Mengwi District.

c) Usage does not mediate the relationship between service quality and net benefits. Usage as a mediating variable does not show a statistically significant positive effect between service quality and net benefits in cooperatives in Badung Regency, particularly in Mengwi District.

d) User satisfaction mediates the relationship between information quality and net benefits. As a mediating variable, user satisfaction has a statistically significant positive effect in strengthening the link between information quality and net benefits in cooperatives in Badung Regency, particularly in Mengwi District.

e) User satisfaction mediates the relationship between system quality and net benefits. User satisfaction has a statistically significant positive effect as a mediating variable between system quality and net benefits in cooperatives in Badung Regency, particularly in Mengwi District.

f) User satisfaction does not mediate the relationship between service quality and net benefits. User satisfaction does not exhibit a statistically significant positive mediating effect between service quality and net benefits in cooperatives in Badung Regency, particularly in Mengwi District.

REFERENCES

1. Aboelmaged, M. G. (2018). Predicting the success of Twitter in healthcare: A synthesis of perceived quality, usefulness, and flow experience by healthcare professionals. *Online Information Review, 42*(6), 898-922. https://doi.org/10.1108/OIR-01-2017-0018

2. Almaiah, M. A., & Alismaiel, O. A. (2019). Examination of factors influencing the use of mobile learning system: An empirical study. *Education and Information Technologies, 24*(1), 885-909. https://doi.org/10.1007/s10639-018-9810-7

3. Al-Mamary, Y. H. S. (2019). Measuring information systems success in Yemen: Potential of DeLone and McLean model. *International Journal of Scientific and Technology Research, 8*(7), 793-799.

4. Al-Okaily, A., Shaari, M., Rahman, A., Al-Okaily, M., Syahida, W. N., Ismail, W., & Ali, A. (2020). Measuring success of accounting information system: Applying the DeLone and McLean model at the organizational level. *Journal of Theoretical and Applied Information Technology, 31*(14).

5. Alzahrani, A. I., Mahmud, I., Ramayah, T., Alfarraj, O., & Alalwan, N. (2019). Modelling digital library success using the DeLone and McLean information system success model. *Journal of Librarianship and Information Science, 51*(2), 291-306. https://doi.org/10.1177/0961000617726123

6. Al-Zahrani, M. S. (2020). Integrating IS success model with cybersecurity factors for e-government implementation in the Kingdom of Saudi Arabia. *International Journal of Electrical and Computer Engineering, 10*(5). https://doi.org/10.11591/ijece.v10i5.pp4937-4955

7. Ardiansyah, F. H., Elfiswandi., & Pratiwi, H. (2024). Analisis kesuksesan sistem absensi online dengan pendekatan model DeLone dan McLean pada Badan Pengelolaan Keuangan dan Aset Daerah Provinsi

Sumatera Barat. *Santhet: Jurnal Sejarah, Pendidikan, dan Humaniora, 8*(2). https://doi.org/10.36526/santhet.v8i2.4334

8. Bodnar, G., & Hopwood, W. (2000). *Sistem Informasi Akuntansi* (Edisi pertama). Salemba Empat.

9. Bradford, M., Henderson, D., Baxter, R. J., & Navarro, P. (2020). Using generalized audit software to detect material misstatements, control deficiencies, and fraud: How financial and IT auditors perceive net audit benefits. *Auditing Journal, 35*(4), 521-547. https://doi.org/10.1108/MAJ-05-2019-2277

10. 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

11. 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

12. Devi, N. M. K., & Dharmadiaksa, I. B. (2021). Efektivitas penerapan sistem informasi akuntansi, kecanggihan teknologi, internal locus of control dan kinerja pegawai. *E-Jurnal Akuntansi, 31*(6). https://doi.org/10.24843/eja.2021.v31.i06.p07

13. Ghozali, H. I., & Kusumadewi, K. A. (2023). *Partial Least Squares: Konsep, Teknik, dan Aplikasi menggunakan Program SmartPLS 4.0 untuk Penelitian Empiris* (Edisi Satu). Yoga Pratama.

14. Hakim, P. J., & Misra, F. (2024). Pengaruh kualitas sistem dan kualitas informasi terhadap manfaat bersih dengan intensitas penggunaan sebagai variabel mediasi (Studi pada penggunaan SIPD pada OPD TAPD Provinsi Sumatera Barat). *Management Studies and Entrepreneurship Journal, 5*(2), 4875-4888.

15. Jeyaraj, A. (2020). DeLone & McLean models of information system success: Critical meta-review and research directions. *International Journal of Information Management, 54*. https://doi.org/10.1016/j.ijinfomgt.2020.102139

16. Kurnianto, S., Kurniawansyah, D., & Fitri Ekasari, W. (2019). Menilai keberhasilan sistem keuangan desa (Siskeudes): Validasi model keberhasilan sistem informasi DeLone dan McLean. *Jurnal Riset Akuntansi dan Bisnis Airlangga, 4*(2). https://doi.org/10.20473/jraba.v4i2.46039

17. Lee, E. Y., & Jeon, Y. J. J. (2020). The difference of user satisfaction and net benefit of a mobile learning management system according to self-directed learning: An investigation of cyber university students in hospitality. *Sustainability (Switzerland), 12*(7), 1-14. https://doi.org/10.3390/su12072672

18. Lutfi, A. (2023). Factors affecting the success of accounting information system from the lens of DeLone and McLean IS model. *International Journal of Information Management Data Insights, 3*(2). https://doi.org/10.1016/j.jjimei.2023.100202

19. Mardiana, S., Tjakraatmadja, J. H., & Aprianingsih, A. (2015). DeLone-McLean information system success model revisited: The separation of intention to use-use and the integration of technology acceptance models. *International Journal of Economics and Financial Issues, 10-11.*

20. Marjanovic, U., Delić, M., & Lalic, B. (2016). Developing a model to assess the success of e-learning systems: Evidence from a manufacturing company in transitional economy. *Information Systems and E-Business Management, 14*(2), 253-272. https://doi.org/10.1007/s10257-015-0282-7

21. Masunga, F. J., Mapesa, H. J., & Nyalle, M. A. (2020). Quality of e-tax system and its effect on tax compliance (Evidence from large taxpayers in Tanzania). *International Journal of Commerce and Finance, 6*(2), 145-158. https://doi.org/10.32602/jafas.2020.027

22. Mellouli, M., Bouaziz, F., & Bentahar, O. (2020). E-government success assessment from a public value perspective. *International Review of Public Administration, 25*(3), 153-174. https://doi.org/10.1080/12294659.2020.1799517

23. Mujali Al-rawahna, A. S., Chen, S.-C., & Hung, C.-W. (2018). The barriers of e-government success: An empirical study from Jordan. *International Journal of Managing Public Sector Information and Communication Technologies, 9*(2), 01-18. https://doi.org/10.5121/ijmpict.2018.9201

24. Muthia, A., Wahyu, N., & Putra, M. (2019). Pengujian kesuksesan implementasi sistem informasi akuntansi pada usaha kecil menengah dengan model adaptasi DeLone & McLean. *In Bisnis Indonesia, 3*(1). https://doi.org/10.18196/rab.030133

25. Nayaka, A. A. B. S., & Suardikha, I. M. S. (2019). Kepuasan kerja dan integritas sebagai pemoderasi pengaruh penerapan sistem informasi akuntansi pada kinerja karyawan. *E-Jurnal Akuntansi*. https://doi.org/10.24843/eja.2019.v26.i01.p17

26. Nurhaida, A. M., & Putra W. M. (2019). Pengujian kesuksesan implementasi sistem informasi akuntansi pada usaha kecil menengah dengan model adaptasi DeLone & McLean. *Reviu Akuntansi dan Bisnis Indonesia, 3*(1), 14-26. https://doi.org/10.18196/rab.030133

27. Petter, S., DeLone, W., & McLean, E. (2008). Measuring information systems success: Models, dimensions, measures, and interrelationships. *European Journal of Information Systems, 17*(3), 236-263. https://doi.org/10.1057/ejis.2008.15

28. Pratiwi, N. P. D., & Ariyanto, D. (2022). Penilaian kesuksesan penerapan Xero accounting software dengan model UTAUT dan DeLone & McLean. *E-Jurnal Akuntansi, 32*(2), 451-468. https://doi.org/10.24843/EJA.2022.v32.i02.p13

29. Rachmadi, T. Y., & Handaka, R. D. (2019). Evaluasi penerapan e-faktur dengan model kesuksesan sistem informasi DeLone dan McLean (Studi kasus di KPP Pratama Metro). *Substansi: Sumber Artikel Akuntansi Auditing dan Keuangan, 3*(2). https://doi.org/10.35837/subs.v3i2.580

30. Rahayu, F. S., Apriliyanto, R., Putro, Y. S. P. W. (2018). Analisis kesuksesan sistem informasi kemahasiswaan (SIKMA) dengan pendekatan model DeLone dan McLean. *Indonesian Journal of Information Systems (IJIS), 1*(1). https://doi.org/10.24002/ijis.v1i1.1704

31. Shim, M., & Jo, H. S. (2020). What quality factors matter in enhancing the perceived benefits of online health information sites? Application of the updated DeLone and McLean information systems success model. *International Journal of Medical Informatics*. https://doi.org/10.1016/j.ijmedinf.2020.104093

32. Sorongan, E., & Hidayati, Q. (2020). Evaluation of implementation e-government with DeLone and McLean. *INTENSIF: Jurnal Ilmiah Penelitian Dan Penerapan Teknologi Sistem Informasi, 4*(1), 22-37. https://doi.org/10.29407/intensif.v4i1.13067

33. Sugiyono. (2017). *Metode Penelitian Pendidikan (Pendekatan Kuantitatif, Kualitatif, dan R&D)*.

34. Sumantari, N. W. D., & Juliarsa, G. (2023). Efektivitas sistem informasi akuntansi, budaya organisasi dan kinerja karyawan dengan insentif dan motivasi sebagai variabel moderasi. *E-Jurnal Akuntansi, 33*(2), 377. https://doi.org/10.24843/eja.2023.v33.i02.p07

35. Syahfitri, K. R., Trisnawati, R., & Ahyani, F. (2022). Dampak kualitas sistem, kualitas informasi, dan kualitas layanan terhadap net benefit pemakaian website Lazismu Solo dengan variabel intervening kepuasan pengguna. *Jurnal Akuntansi: Sekolah Tinggi Ilmu Ekonomi Muhammadiyah Palopo, 8*(2). https://doi.org/10.35906/jurakun.v8i2.1017

36. Tam, C., & Oliveira, T. (2016). Understanding the impact of M-banking on individual performance: DeLone & McLean and TTF perspective. *Computers in Human Behavior*, 233-244. https://doi.org/10.1016/j.chb.2016.03.016

37. Undang-undang Republik Indonesia Nomor 25 Tahun 1992 tentang Perkoperasian. (1992). Indonesia.

38. Urus, S., H. K. N. S. M. T. (2020). Critical success factors of accounting information systems (AIS): Empirical evidence from Malaysian organizations. *Management & Accounting Review, 19*(1). https://doi.org/10.24191/MAR.V19i01-09

39. Veeramootoo, N., Nunkoo, R., & Dwivedi, Y. K. (2018). What determines success of an e-government service? Validation of an integrative model of e-filing continuance usage. *Government Information Quarterly, 35*(2), 161-174. https://doi.org/10.1016/j.giq.2018.03.004