Sibatik Journal
Jurnal Ilmiah Bidang Sosial, Ekonomi, Budaya, Teknologi, dan Pendidikan
E-ISSN: 2809-8544

THE DELONE MCLEAN MODEL IN EVALUATING THE SUCCESS OF THE SAKTI SYSTEM AT THE CENTRAL JAVA DISTRICT ATTORNEY'S OFFICE

Adi Fariz Saputra[1]*, Lela Nurlaela Wati[2], Martino Wibowo[3]
Universitas Terbuka, Indonesia[1,3], Universitas Teknologi Muhammadiyah Jakarta, Indonesia[2]
Email: adicolumbus@gmail.com[1]*, lela@utmj.ac.id[2], tino@ecampus.ut.ac.id[3]

Abstract

The advancement of information and communication technology (ICT) has driven digital transformation in Indonesia's public finance sector, exemplified by the Agency Level Financial Application System (SAKTI). This study evaluates the success of SAKTI implementation within the District Prosecutor's Offices in the Central Java High Prosecutor's Office jurisdiction by examining the effects of system, information, and service quality on user use and satisfaction, as well as their impact on the organization's net benefits. Using a quantitative approach, data from 270 active users were analyzed using Structural Equation Modeling Partial Least Squares (SEM-PLS). The results indicate that system quality, information quality, and service quality all have a significant positive effect on both the use of the application and user satisfaction. Furthermore, application use was found to mediate the relationship between these three quality factors and satisfaction. Finally, both application use and user satisfaction were shown to have a significant positive influence on the net benefits perceived by the work units. This study confirms that a holistic approach focusing on system, information, and service quality is crucial for driving user adoption, satisfaction, and ultimately, the successful implementation of e-government financial systems like SAKTI.

Keywords: SAKTI, e-Government, State Finance, PNBP, User Satisfaction, System Quality.

INTRODUCTION

Demands for high-quality and transparent public services are increasing. To meet these demands, the Indonesian government has undertaken various initiatives, one of which is the e-government initiative (Sugiartini & Tamamiyah, 2024). The primary goal of implementing e-Government is to improve the quality of public services through the use of information technology to streamline government administration processes. Furthermore, e-Government also aims to foster transparency and responsiveness, build a government that is open to public scrutiny, and able to meet the needs of citizens. Research results (Sugiartini & Tamamiyah, 2024) shows that e-government in Indonesia has provided several benefits, including increasing the efficiency and effectiveness of public services, increasing transparency and accountability of public services, and increasing the accessibility of public services.

SAKTI is a comprehensive financial system designed to streamline all financial processes, from initial planning to final accountability. This system integrates various work unit applications with a focus on budget planning, implementation, and reporting. SAKTI, developed as a modification of IFMIS by the APBN fund management work unit, aims to improve financial management by making it systematic, efficient, effective, transparent, accountable, integrated, and performance-based. However, in its implementation, SAKTI has encountered various challenges, including system stability issues, output quality issues, technical difficulties, and inadequate support services. Other problems arise from complex application features, unstable internet connections, incomplete report displays, limited

DOI: https://doi.org/10.54443/sibatik.v5i2.4414

technical training, and poor communication between central and regional administrators and operators. For the successful implementation of SAKTI, a joint effort is required from all work units of Ministries/Institutions (Firdaus & Adrianto 2024).

The implementation of the SAKTI system in the District Attorney's Office within the jurisdiction of the Central Java High Prosecutor's Office during the trial period encountered various obstacles, as the author has conveyed in other Ministry of Finance work units that have previously adopted SAKTI. The main obstacles encountered include human resource competency, barriers to change, inadequate IT infrastructure, application reliability, and cooperation with the Directorate General of Treasury (DJPb) as the main SAKTI administrator. The Directorate General of Taxes (DJP), one of the important units within the Ministry of Finance, is scheduled to carry out the third year of the SAKTI trial phase for Ministry of Finance work units.

The implementation of the Agency-Level Financial Application System (SAKTI) at the District Attorney's Office under the jurisdiction of the Central Java High Prosecutor's Office aims to improve the efficiency and transparency of financial management. However, the effectiveness of this implementation requires a comprehensive evaluation to ensure the system truly supports the organization's operations. The DeLone and McLean model, which identifies key success factors for information systems, can be used as a framework for evaluating the effectiveness of SAKTI. This evaluation will focus on system and information quality, user satisfaction, usage rates, net impact, and user intention to continue using the system.

Testing system implementations using the DeLone and McLean framework has been the subject of various studies. One of these is the study (Amriani & Iskandar, 2019) which uses four hypotheses and five variables to assess the effectiveness of SAKTI implementation at the Financial Education and Training Agency (BPPK). Muhammad Rizqi At-Tamimi and Siregar's (2021) analysis of the Ministry of State Secretariat's success yielded a model fit of 74%.

Furthermore, successful research on the Kitabisa mobile application was conducted by (Aditya et al., 2020) which proposed ten hypotheses, three of which were validated. The study showed that net benefits were positively and significantly influenced by customer satisfaction. Furthermore, 59.4% of user satisfaction variables had a substantial impact on net benefits (Andriyanto et al., 2021). Finally, research on the efficacy of student information systems by(Rahayu et al., 2018)found that five of the ten hypotheses were accepted while the other five were rejected.

The District Attorney's Office within the jurisdiction of the Central Java High Prosecutor's Office can conduct a comprehensive analysis and evaluation of the successful implementation of the Agency-Level Financial Application System (SAKTI) using the DeLone and McLean Model approach. This study aims to fill the gaps in previous studies, such as (Viontita & Mahendrawathi, 2024; Lutfi, 2023) by examining the influence of system quality and information quality on application user satisfaction, and considering the mediating role of service quality. The DeLone and McLean model has been widely used in

DOI: https://doi.org/10.54443/sibatik.v5i2.4414

various studies to evaluate the success of information system implementation. However, previous studies generally only examined the influence of system quality and information quality on user satisfaction without considering service quality as a mediating variable. This gap is important because service quality can be a determining factor in building a better user experience with the system.

This study contributes by adding a new perspective to the analysis of the successful implementation of the SAKTI system, specifically by positioning service quality as a previously untested mediating variable. This approach allows for more comprehensive insight into how technical and informational factors within the application system can enhance user satisfaction through improved service quality. This study is unique and novel because it provides a more focused perspective on the Attorney General's Office environment, and most importantly, by adding a mediating variable, namely service quality. This provides a more comprehensive view. Therefore, this study is expected to make a significant contribution to understanding and improving the successful implementation of the SAKTI system within the District Attorney's Office, as well as providing new insights for future research.

Given these significant differences, the authors are interested in examining the DeLone and McLean Model Approach in analyzing the Success of the Implementation of the Agency-Level Application System (SAKTI) in the District Attorney's Office Work Units within the Central Java High Prosecutor's Office jurisdiction. It is hoped that the results of this study can provide input and reference for all work units in Indonesia, especially the District Attorney's Office within the Central Java High Prosecutor's Office jurisdiction.

This study is novel in several aspects. First, it adds a mediating variable of service quality that has not been tested in previous studies on SAKTI implementation. Second, it specifically focuses on the District Attorney's Office environment within the jurisdiction of the Central Java High Prosecutor's Office, which has not been widely explored in previous research. Third, it integrates various factors influencing the success of information system implementation within the framework of the DeLone and McLean Model, modified to suit the context of SAKTI implementation in the Attorney General's Office.

The implementation of the Agency-Level Financial Application System (SAKTI) in the District Attorney's Office work unit within the jurisdiction of the Central Java High Prosecutor's Office faces various challenges in achieving optimal effectiveness. Although SAKTI is designed to improve the efficiency and accountability of state financial management, the level of use and user satisfaction still varies. The implementation of this system within the Central Java District Attorney's Office has encountered several obstacles, including limited human resource competency, resistance to change, inadequate information technology infrastructure, technical application problems, and limited coordination with the Directorate General of Treasury as the main SAKTI administrator. Based on these conditions, this study aims to evaluate the factors influencing the successful implementation of SAKTI, including system quality, information quality, service quality, use, user

DOI: https://doi.org/10.54443/sibatik.v5i2.4414

satisfaction, and net benefits, by referring to the DeLone and McLean model, in order to provide useful insights for improving the effectiveness of this system's implementation.

METHOD

The authors of this research used a quantitative methodology. The quantitative approach relies on data that can be objectively evaluated and examined (Creswell, 2016). The research location is the place or object where research is conducted. The research location is at the District Attorney's Office within the jurisdiction of the Central Java High Prosecutor's Office.The population in this study were 280 employees who used the SAKTI application..The researchers used a non-probability sampling method, namely purposive sampling. The sample size used in this study was calculated using Hair's formula. Based on Hair's formula, the sample size for this study was 270 respondents.

The DeLone and McLean Model approach will be the main focus of this research analysis on the successful implementation of the Agency Level Application System (SAKTI) of the District Attorney's Office work unit in the jurisdiction of the Central Java High Prosecutor's Office. The following research instrument grid related to the dependent variables was developed to clarify measurable indicators and simplify the process of formulating questions.

Table 1. Research Instruments

Variables	Indicator	Item No.
System Quality	1. Availability	1.2
	2. System flexibility	3.4
	3. Response time	5.6
	4. Integration	7.8
Information Quality	*1. Relevance*	9,10
	2. Usefulness	11.12
	3. Understandability	13.14
	4. Accuracy	15,16
	5. Reliability	17,18
	6. Currency	19.20
	7. Completeness	21,22
	8. Timeliness	23.34
Service Quality	1. Assurance	25.26
	2. Empathy	27.28
User Satisfaction	1. Efficiency	29.30
	2. Effectiveness	31.32
	3. Satisfaction	33.34
Use	1. Daily use	35.36
	2. Frequency of use	37.38
	3. Intention to use	39.40

DOI: https://doi.org/10.54443/sibatik.v5i2.4414

Variables	Indicator	Item No.
Net Benefits	1. Job performance	41.42
	2. Work productivity (task productivity)	43.44
	3. Effectiveness	45.46
	4. Make work easier (ease of use)	47.48
	5. Usefulness	49.50
	6. Cost reductions	51.52
	7. Decision maker	53.54

Source: Data processed by the author 2025

To test the hypothesis, this study used the SEM-PLS approach with SmartPLS software. PLS is a unique SEM methodology suitable for this research, while SEM is a statistical tool that can investigate multiple variables simultaneously.

RESULTS AND DISCUSSION

PLS Analysis Results

Measurement Model (Outer Model)

Outer model evaluation aims to assess the validity and reliability of the indicators used to measure each latent variable (construct). In PLS-SEM, this evaluation is a crucial step before proceeding to hypothesis testing on the structural model. There are two main types of validity tested: convergent validity and discriminant validity, as well as construct reliability testing.

Convergent Validity

Convergent validity measures the extent to which indicators of a construct are truly positively correlated and measure the same construct. According to (Sarstedt et al., 2011), convergent validity can be assessed through three main criteria: outer loadings value, Average Variance Extracted (AVE), and Composite Reliability (CR).

Outer Loadings

The outer loading or loading factor value indicates the magnitude of the correlation between each indicator and its latent construct. The ideal loading value is above 0.70, meaning more than 50% of the indicator's variance can be explained by the construct. However, loading values between 0.50 and 0.70 are still acceptable if their removal does not significantly increase the composite reliability value. Indicators with loadings below 0.50 are recommended for removal from the model. Based on the results of data analysis using SmartPLS, the outer loadings values for each indicator in each construct are as follows:

DOI: https://doi.org/10.54443/sibatik.v5i2.4414

Table 2. Outer Loadings Test Results

	Information Quality	Net Benefits	Service Quality	System Quality	Use	User Satisfaction
IQ01	0.784					
IQ02	0.788					
IQ03	0.813					
IQ04	0.861					
IQ05	0.869					
IQ06	0.895					
IQ07	0.881					
IQ08	0.864					
IQ09	0.881					
IQ10	0.875					
IQ11	0.900					
IQ12	0.883					
IQ13	0.869					
IQ14	0.847					
IQ15	0.838					
IQ16	0.790					
NB01		0.837				
NB02		0.872				
NB03		0.880				
NB04		0.886				
NB05		0.889				
NB06		0.895				
NB07		0.902				
NB08		0.894				
NB09		0.900				
NB10		0.871				
NB11		0.878				
NB12		0.852				
NB13		0.856				
NB14		0.817				
SQ01				0.846		
SQ02				0.885		
SQ03				0.877		
SQ04				0.884		
SQ05				0.851		
SQ06				0.877		
SQ07				0.871		

DOI: https://doi.org/10.54443/sibatik.v5i2.4414

	Information Quality	Net Benefits	Service Quality	System Quality	Use	User Satisfaction
SQ08				0.846		
SRQ01			0.930			
SRQ02			0.960			
SRQ03			0.929			
SRQ04			0.919			
U01					0.905	
U02					0.920	
U03					0.924	
U04					0.912	
U05					0.910	
U06					0.894	
US01						0.904
US02						0.907
US03						0.911
US04						0.911
US05						0.922
US06						0.898

Source: SmartPLS Data Processing Results (2025)

Based on the table above, it can be seen that all indicators used in this study have outer loadings above 0.70. The lowest loading value is 0.784 for the IQ01 indicator, and the highest is 0.960 for the SRQ02 indicator. Since all loading values have exceeded the recommended threshold (0.70), it can be concluded that all indicators are valid and able to reflect the latent constructs they measure. This indicates that the questions in the questionnaire representing each indicator have been well understood by respondents and accurately measure the intended concept.

Average Variance Extracted (AVE)

AVE measures the average variance extracted from indicators by a latent construct. The recommended AVE value is greater than 0.50, indicating that the construct is able to explain more than 50% of the variance in its indicators. In other words, the variance captured by the construct is greater than the variance caused by measurement error.

Reliability

Construct reliability is measured using Composite Reliability (CR) and Cronbach's Alpha. These two measures assess the internal consistency of indicators within a construct. The recommended value for both is above 0.70. Composite Reliability is often considered a better measure than Cronbach's Alpha in the context of PLS-SEM because it does not assume

DOI: https://doi.org/10.54443/sibatik.v5i2.4414

that all indicators have equal weight. The results of Composite Reliability and Cronbach's Alpha calculations for all constructs are presented in the following table:

Table 3. Results of Reliability and Convergent Validity Tests

Latent Variables	Cronbach's Alpha	Composite Reliability (CR)	Average Variance Extracted (AVE)	Information
Information Quality	0.975	0.977	0.728	Reliable & Valid
Service Quality	0.952	0.965	0.873	Reliable & Valid
System Quality	0.953	0.960	0.752	Reliable & Valid
Use	0.959	0.967	0.829	Reliable & Valid
User Satisfaction	0.958	0.966	0.826	Reliable & Valid
Net Benefits	0.976	0.978	0.763	Reliable & Valid

Source: SmartPLS Data Processing Results (2025)

The analysis in the table shows very satisfactory results. All constructs have Cronbach's Alpha values above 0.70, ranging from 0.952 (Service Quality) to 0.976 (Net Benefits). This indicates that the questionnaire used has good internal consistency. Composite Reliability (CR) values for all constructs are also well above the 0.70 threshold. The lowest value is 0.960 for the System Quality construct and the highest is 0.978 for Net Benefits. These results confirm the high level of reliability of all measurement scales.

The Average Variance Extracted (AVE) values for all five constructs convincingly exceed the minimum value of 0.50. AVE values range from 0.752 (System Quality) to 0.873 (Service Quality). This indicates that more than 75% of the variance in each set of indicators can be explained by its respective latent construct, providing strong evidence for convergent validity.

Overall, based on the three criteria (outer loadings, CR, and AVE), it can be concluded that the measurement model (outer model) in this study has met all the requirements for convergent validity and reliability.

Discriminant Validity

Discriminant validity ensures that a construct is empirically distinct and does not overlap with other constructs in the model. In other words, each construct must be unique and measure a concept not measured by other constructs. In this study, discriminant validity was tested using two main methods: the Fornell-Larcker criterion and the Heterotrait-Monotrait Ratio (HTMT).

The Fornell-Larcker method compares the square root of the AVE (√AVE) of each construct with the correlation values between constructs. Discriminant validity is achieved if the √AVE value for each construct is higher than its correlation value with all other constructs in the model.

DOI: https://doi.org/10.54443/sibatik.v5i2.4414

Table 4. Results of Discriminant Validity Test - Fornell-Larcker Criteria

	Information Quality	**Net Benefits**	**Service Quality**	**System Quality**	**Use**	**User Satisfaction**
Information Quality	**0.853**					
Net Benefits	0.420	**0.874**				
Service Quality	0.506	0.502	**0.934**			
System Quality	0.445	0.519	0.446	**0.867**		
Use	0.503	0.676	0.569	0.708	**0.911**	
User Satisfaction	0.616	0.681	0.615	0.684	0.848	**0.909**

The table above shows the results of the Fornell-Larcker criterion test. The diagonal values in bold are the √AVE values for each construct, and the values in the rows and columns are all smaller than the diagonal values. Thus, based on the Fornell-Larcker criterion, the discriminant validity of this measurement model has been met.

The Heterotrait-Monotrait Ratio (HTMT) is a more modern method and is considered more sensitive for detecting discriminant validity issues. HTMT measures the ratio of correlations between constructs (heterotraits) to correlations within constructs (monotraits). A commonly used cutoff value is 0.90; if the HTMT value between two constructs is below 0.90, discriminant validity is considered met.

Table 5. Results of Discriminant Validity Test - HTMT

	Information Quality	**Net Benefits**	**Service Quality**	**System Quality**	**Use**	**User Satisfaction**
Information Quality						
Net Benefits	0.428					
Service Quality	0.523	0.518				
System Quality	0.461	0.536	0.468			
Use	0.519	0.695	0.592	0.740		
User Satisfaction	0.636	0.701	0.642	0.714	0.884	

Source: SmartPLS Data Processing Results (2025)

The results show that all HTMT values are below the conservative threshold of 0.90. The highest HTMT value is 0.884. While this value is quite high, indicating a strong relationship, it is still below the established threshold. The other values are substantially lower.

DOI: https://doi.org/10.54443/sibatik.v5i2.4414

Therefore, based on the HTMT criteria, it can be concluded that discriminant validity has been achieved. Both tests (Fornell-Larcker and HTMT) consistently confirm that each construct in this study is a unique and empirically distinct entity, so this measurement model is worthy of further analysis at the structural model stage.

This study has 8 Direct Effect Hypotheses. Hypothesis testing is conducted by analyzing path coefficients, T-statistics, and P-values resulting from the bootstrapping procedure (with 500 resamples). Hypotheses are considered supported if the P-values are smaller than the specified significance level (α = 0.05), which is equivalent to a T-statistic value above 1.96. The following figure shows the structural model and its path coefficient values.

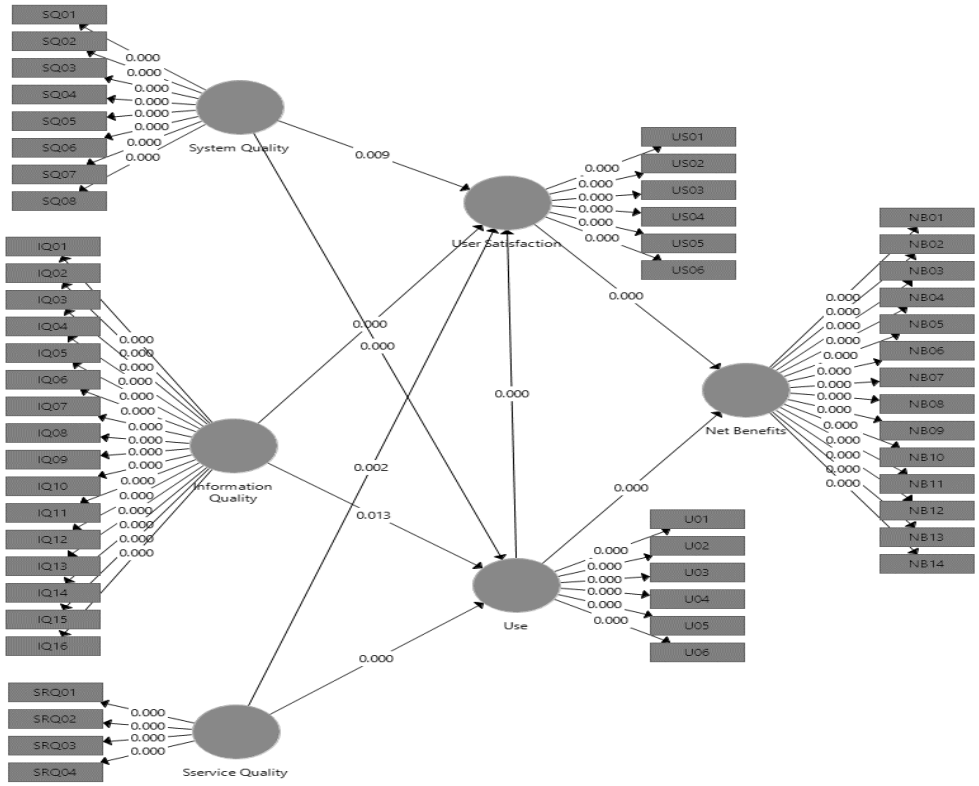

Figure 1. Bootstrap results

Based on Figure 1, all direct effect hypotheses (H1 to H7) show P-values below 0.05 and T-statistics above 1.96. Therefore, all seven direct effect hypotheses are accepted. The detailed interpretation is as follows:

Table 6. Results of Direct Hypothesis Testing

	Original sample	T statistics	P values
Information Quality -> Use	0.134	2,498	0.013
Information Quality -> User Satisfaction	0.203	4,729	0.000
Service Quality -> Use	0.264	4,616	0.000
Service Quality -> User Satisfaction	0.123	3,084	0.002

DOI: https://doi.org/10.54443/sibatik.v5i2.4414

System Quality -> Use	0.531	9,351	0.000
System Quality -> User Satisfaction	0.120	2,627	0.009
Use -> Net Benefits	0.351	3,555	0.000
Use -> User Satisfaction	0.591	11,668	0.000
User Satisfaction -> Net Benefits	0.383	4,041	0.000

Source: SmartPLS Data Processing Results (2025)

Based on the results above, all direct influence paths show P-values below 0.05 and T-statistics above 1.96. The results of Hypothesis 1 testing indicate that the influence of System Quality on Use (use of the SAKTI application) provides a significant p-value of 0.000 <0.05. This indicates that Hypothesis 1 is accepted. This means that when SAKTI is perceived as fast, accurate, and reliable (high system quality), users will see it as a truly helpful tool. They feel that tasks such as data input, document searches, or report creation become more efficient. This encourages them to want to use SAKTI. Conversely, poor system quality (frequent errors, slow, complicated) is a major obstacle. If the system quality is high (easy to use and reliable), these obstacles disappear. Users do not feel frustrated or afraid of making mistakes when operating it, so they do not look for shortcuts or parallel systems, the results of this study are supported by Sihotang's research, (2020).

The results of the Hypothesis 2 test show that the influence of Information Quality on Use (use of the SAKTI application) provides a significant p-value of 0.013 < 0.05. This indicates that Hypothesis 2 is accepted. This means that when SAKTI is perceived to have accurate, relevant, consistent, and timely information, users will see it as a truly helpful tool. The budget requires accurate and timely realization information to decide on budget absorption. If the quality of the information is poor, the decisions taken can be wrong and risky. With quality information, SAKTI can be an irreplaceable tool, the results of this study are supported by researchIrma Hartiwi & Rokhayati, (2024)

The results of testing Hypothesis 3 show that the influence of Service Quality (system service quality) on Use (use of the SAKTI application) provides a significance value of p-value of 0.000 < 0.05. This indicates that Hypothesis 3 is accepted. This means that if the SAKTI system has high service quality (for example, rarely down, fast, and easy to use), users will have more trust in the system. This trust encourages them to use the application more intensively, the results of this study are supported by research (Annisa Asri Imana.,2021).

The results of testing Hypothesis 4 show that the influence of System Quality on User Satisfaction (user satisfaction of the SAKTI application) provides a significant p-value of 0.009 < 0.05. This indicates that Hypothesis 4 is accepted. This means that a smooth, easy, and reliable user experience when interacting with SAKTI's technical features directly creates feelings of satisfaction and pleasure, the results of this study are supported (Al-Fraihat et al.,2020).

The results of testing Hypothesis 5 indicate that the influence of Information Quality on User Satisfaction (user satisfaction of the SAKTI application) provides a significant p-

DOI: https://doi.org/10.54443/sibatik.v5i2.4414

value of 0.000 < 0.05. This indicates that Hypothesis 5 is accepted. This means that user trust and confidence in the accuracy and usefulness of the information produced by SAKTI is the main foundation that builds feelings of satisfaction. If the quality of information is low, users will spend time and energy to verify the accuracy of SAKTI data with other sources (physical archives, Excel, etc.). This extra verification process is tiring and causes dissatisfaction. In contrast, high-quality information eliminates this burden, creating satisfaction due to efficiency and certainty, the results of this study support research (Sihotang, 2020).

The results of testing Hypothesis 6 show that the influence of Service Quality (system service quality) on User Satisfaction (SAKTI application user satisfaction) provides a significance value of p-value of 0.002 < 0.05. This indicates that Hypothesis 6 is accepted. This means that when users are most vulnerable (i.e. when experiencing problems), the quality of service they receive will determine whether they feel supported or abandoned, which directly forms feelings of satisfaction or dissatisfaction, the results of this study support the research (Sihotang.,2020).

The results of the Hypothesis 7 test show that the influence of Use (application usage) on User Satisfaction (user satisfaction of the SAKTI application) provides a significance value of p-value of 0.000 < 0.05. This indicates that Hypothesis 7 is accepted. This means that the more often or more deeply a user uses the SAKTI application in their work, the more satisfied they will be with the application, the results of this study support the research (Ismail et al., 2025).

The results of testing Hypothesis 11 indicate that the influence of Use (application usage) on Net Benefits (net benefits from the SAKTI application) provides a significance value of p-value of 0.000 < 0.05. This indicates that Hypothesis 11 is accepted. This means that the value or benefits of a system will only be realized if the system is actually used. Usage is a catalyst that turns potential benefits into reality, the results of this study support the research. DeLone & McLean, (2003); And Wahyuni, (2017).

The results of testing Hypothesis 12 show that the influence of User Satisfaction (application user satisfaction) on Net Benefits (net benefits from the SAKTI application) provides a significant p-value of 0.000 < 0.05. This indicates that Hypothesis 11 is accepted. This means that satisfied users do not only use the system because they are forced to, but because they want to use it. In other words, satisfaction is the fuel for deep adoption, and this deep adoption is what ultimately produces greater benefits, the results of this study support the research DeLone & McLean, (2003); And Wahyuni, (2017).

Hypothesis TestingMediation (Indirect Effect Analysis)

In addition to the direct effect, this study also tested the mediation hypothesis, where Use acts as an intermediary variable between System Quality, Information Quality, and Service Quality and User Satisfaction. This test was conducted by examining the significance of specific indirect effects.

DOI: https://doi.org/10.54443/sibatik.v5i2.4414

Table 7. Results of Mediation Hypothesis Testing

	Original sample	T statistics	P values
Information Quality -> Use -> User Satisfaction	0.079	2,404	0.017
Service Quality -> Use -> User Satisfaction	0.156	4,703	0.000
System Quality -> Use -> User Satisfaction	0.314	7,035	0.000

Source: SmartPLS4 Data Processing Results (2025)

The results in the table above show that all three mediation hypotheses are accepted. The results of testing Hypothesis 8 show that the influence system quality on user satisfaction mediated by Application Usage provides a significance value of 0.000 < 0.05. This indicates that Hypothesis 8 is accepted. High System Quality (e.g., easy to use, fast, reliable) makes users use the SAKTI application more frequently and more easily. In other words, good system quality encourages increased usage. Furthermore, increased application usage then leads to higher User Satisfaction. This is because by using the application intensively, users can complete tasks more efficiently, discover benefits, and become more proficient, which ultimately leads to feelings of satisfaction, the results of this study support the research (Fernanda, 2024).

The results of testing Hypothesis 9 show that the influenceinformation quality on user satisfactionmediated by application usage yields a significance value of 0.017 < 0.05. This indicates that Hypothesis 9 is accepted. When information in SAKTI is accurate, relevant, timely, and complete, users develop trust in the system. This trust encourages them to rely on SAKTI as the primary source of truth, which increases the intensity and depth of use, which ultimately increases satisfaction. The results of this study support the research (Alawneh et al., 2013).

The results of testing Hypothesis 10 show that the influenceapplication service quality on user satisfactionmediated by application usage yields a significance value of 0.000 < 0.05. This indicates that Hypothesis 10 is accepted. Application usage becomes a mechanism by which good service quality translates into positive experiences that ultimately increase satisfaction. Without increased usage, high service quality may only create limited satisfaction (e.g., satisfied because the service is good, but dissatisfied with the application because it is not used optimally), the results of this study support research (Nur Asyifa.,2016).

CONCLUSION

The conclusion of this study is that system quality, information quality, and service quality significantly influence application usage and user satisfaction. Furthermore, application usage has been shown to mediate the influence of these three quality factors on satisfaction. Furthermore, both application usage and user satisfaction have a positive and significant impact on the net benefits perceived by work units.

DOI: https://doi.org/10.54443/sibatik.v5i2.4414

This research suggests that a holistic approach that focuses on the quality of systems, information, and services is crucial to encourage adoption, user satisfaction, and ultimately, the successful implementation of an e-government-based financial system such as SAKTI. The limitation in this study is that there are still independent variables that influenceapplication usage and user satisfaction. Future research can add other variables; suggested variables are employee creativity and work innovative behavior.

REFERENCES

Adikara, H.K. (2014). and Its Legitimacy. 1, 67–73.

Aditya, HNH, Nurmalasari, N., & Hendri, H. (2020). Success Analysis of Kitabisa Mobile Application Information System Using Delone and Mclean Models. Pilar Nusa Mandiri Journal, 16(1), 81–88. https://doi.org/10.33480/pilar.v16i1.918

Agustina, N., & Sutinah, E. (2019). InfoTekJar: National Journal of Informatics and Network Technology. Delone and McLean Model for Testing the Success of Mobile Applications for New Student Admissions. National Journal of Informatics and Network Technology, 3(2), 76–82.

Al-Fraihat, D., Joy, M., Masa'deh, R., & Sinclair, J. (2020). Evaluating E-learning systems success: An empirical study. Computers in Human Behavior, 102(March 2019), 67–86. https://doi.org/10.1016/j.chb.2019.08.004

Alawneh, A., Al-Refai, H., & Batiha, K. (2013). Measuring user satisfaction from e-Government services: Lessons from Jordan. Government Information Quarterly, 30(3), 277–288. https://doi.org/10.1016/j.giq.2013.03.001

Aldholay, AH, Isaac, O., Abdullah, Z., & Ramayah, T. (2018). The role of transformational leadership as a mediating variable in DeLone and McLean information system success model: The context of online learning usage in Yemen. Telematics and Informatics, 35(5), 1421–1437. https://doi.org/10.1016/j.tele.2018.03.012

Amriani, TN, & Iskandar, A. (2019). Economic & Financial Study: Analysis of the Success of Application System Implementation. Journal of Financial Economic Studies, 1(September), 74.

Andriyanto, D., Said, F., Titiani, F., & Erni, E. (2021). Analysis of the Success of the Jakarta Kini (JAKI) Application Using the Delone and McLean Model. Paradigma - Journal of Computers and Informatics, 23(1), 43–48. https://doi.org/10.31294/p.v23i1.10018

Annisa Asri Imana. (2021). Analysis of the Influence of System Quality, Information Quality, and Service Quality on ISD Application User Satisfaction. Computational Scientific Journal, 20(2), 229–235. https://doi.org/10.32409/jikstik.20.2.2714

As'ad, M., Karina, A., & Khairunnisa, S. (2024). Analysis of Implementing the Sakti Application Successfully Based on the User's Net Benefit View (Issue Icbmase 2023). Atlantis Press International BV. https://doi.org/10.2991/978-94-6463-394-8_19

Ashari, F., Wahyulelly, S., & Setyanti, H. (2021). THE EFFECT OF SERVICE QUALITY ON CUSTOMER SATISFACTION AT PT. ASKRINDO. 07, 51–57.

Azhariyah, A., Witjaksono, AD, & Hartono, U. (2021). The Effect of Profitability, Leverage,

DOI: https://doi.org/10.54443/sibatik.v5i2.4414

Liquidity, Size, and Company Growth on the Dividend Payout Ratio in the Indonesian Capital Market 2013-2018. Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences, 4(1), 1351–1360. https://doi.org/10.33258/birci.v4i1.1761

Banafo, A. B., Owusu, E., & Yunfei, S. (2022). Development and validation of an improved DeLone-McLean IS success model - application to the evaluation of a tax administration ERP. International Journal of Accounting Information Systems, 47(8).

Berry, L.L., Parasuraman, A., & Zeithaml, V.A. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. Journal of Retailing, 64(1), 12–40.

Bhattacherjee, A. (2001). Bhattacherjee/lnformation Systems Continuance MIS Qarterjy UNDERSTANDING INFORMATION SYSTEMS CONTINUANCE: AN EXPECTATION-CONFIRMATION MODEL1 Motivation for the Study. MIS Quarterly, 25(3), 351–370.

Bossen, C., Jensen, L.G., & Udsen, F.W. (2013). Evaluation of a comprehensive EHR based on the DeLone and McLean model for IS success: Approach, results, and success factors. International Journal of Medical Informatics, 82(10), 940–953. https://doi.org/10.1016/j.ijmedinf.2013.05.010

BPKP. (2022). SAKTI Application System Evaluation Report.

Creswell, JW (2016). Research Design, Qualitative, Quantitative, and Mixed Methods Approaches. (4th ed.). Learning Library.

Davis, F.D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS Quarterly: Management Information Systems, 13(3), 319–339. https://doi.org/10.2307/249008

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.

Delone, W. H., & McLean, E. R. (1992). Information system success: the quest for the dependent variable,. Information Systems Research, 3, 60-95.

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

DeLone, W.H., & McLean, E.R. (2016). Information Systems Success Measurement. In Foundations and Trends® in Information Systems (Vol. 2, Issue 1). https://doi.org/10.1561/2900000005

Dharma, IGNA, Sukadarmika, G., & Pramaita, N. (2022). Application of DeLone and McLean Methods to Determine Supporting Factors for the Successful Implementation of Electronic Medical Records at Bali Mandara Eye Hospital. Journal of Applied Science, Engineering, Technology, and Education, 4(2), 146–156. https://doi.org/10.35877/454ri.asci1287

Dhian Nur Rahayu, & Lila Setiyani. (2022). Systematic Literature Review: Delone and

Mclean Model using VOSViewer on Google Scholar Database Case Year 2010-2020. International Journal of Science, Technology & Management, 3(1), 22–30. https://doi.org/10.46729/ijstm.v3i1.402

Dian Septiayu Fendini, Kertahadi, & Riyadi. (2012). The Influence of System Quality and Information Quality on User Satisfaction at PT. PLN (Persero) Malang Area. Journal of Business and Economics, 6(1), 9.

Directorate General of Treasury (DJPB). (2020). Directorate General of Treasury (DJPB). Ministry of Finance of the Republic of Indonesia.

Elzius Fransiscus Lumban Gaol, Salma Asy Syifa, and S. (2024). THE EFFECT OF SERVICE QUALITY ON CONSUMER SATISFACTION OF MAXIM TRANSPORTATION SERVICE USERS. 3(2), 1316–1320.

Fatmawati, A., Christina, BA, & Murtiasri, E. (2022). Analysis of the Success of Siap Bos (School Operational Assistance Management Application Information System) in Blora Regency. Journal of Applied Business Financial Accounting (AKUNBISNIS), 5(1), 142. https://doi.org/10.32497/akunbisnis.v5i1.3620

Fernanda, A. (2024). Analysis of the Implementation of the Institutional Financial Application System (SAKTI) for Effective Budgeting at the Central Lampung Prosecutor's Office. J-CEKI: Jurnal Cendekia Ilmiah, 3(5), 5052–5065.

Ghozali, I., & Latan, H. (2020). Partial Least Squares: Concepts, Techniques, and Applications Using the SmartPLS 3.0 Program (2nd ed). UNDIP Publishing Agency.

Ghozali, I. & Latan, H. (2015). Partial Least Squares: Concepts, Techniques and Applications Using SmartPLS 3.0 Program. Diponegoro University Publishing Agency.

Ghozali. (2020). Multivariate Analysis Application with IBM SPSS 21 Program. UNDIP Publishing Agency.

Gultom, CMJ, & Harahap, SN (2024). Implementation of the Agency-Level Financial Application System (SAKTI) in the Preparation of Government Work Unit Financial Reports. Owner, 8(1), 300–313. https://doi.org/10.33395/owner.v8i1.1846

Hadi, M. (2022). Factors Influencing the Successful Implementation of the Sakti Application (Based on a User Perspective). Competitive Accounting Journal, 5(3), 390–397. https://doi.org/10.35446/akuntansikpetif.v5i3.1164

Hair et.al. (2019). Multivariate Data Analysis (Eighth Edi). In Annabel Ainscow.

Hair, JF, Black, WC, Babin, BJ, & Anderson, RE (2017). Multivariate Data Analysis. (7th ed.). Pearson Education, Upper Saddle River.

Hardianti, Hidayatullah, S., & Respati, H. (2021). Implementation of the DeLone and McLean Information System Success Models for Information Systems Based on Social Media. International Journal of Creative Research Throughts (IJCRT), 9(2), 4361–4268.

Irma Hartiwi, LIA, & Rokhayati, H. (2024). Analysis of System Quality, Information Quality, and Service Quality on User Satisfaction in Financial Application Systems at the Work Unit Agency Level. Journal of Management, 20(1), 18–37.

https://doi.org/10.25170/jm.v20i1.4457

Irmawan, I., and, MM-TIJ of P., & 2023, undefined. (2023). Literature review of information system success models in e-government evaluation. Ijobsor.Pelnus.Ac.Id, 11(1), 84–93.

Ismail, AF, Arla, ZV, & Sutabri, T. (2025). Analysis of the Influence of Using the Livin' by Mandiri Application Using the EUSC Method on Consumer Satisfaction in Digital Transactions. 9, 551–553.

Jeyaraj, A. (2020). DeLone & McLean models of information system success: Critical meta-review and research directions. International Journal of Information Management, 54(November 2019), 102139. https://doi.org/10.1016/j.ijinfomgt.2020.102139

Jogiyanto. (2007a). Information Systems Analysis and Design, Fourth Edition,. Andi Offset.

Jogiyanto. (2007b). Behavioral Information System. Andi Publisher.

Kasmir. (2020). Financial Statement Analysis. (5th edition). Rajawali Pers.

Evaluation of the Implementation of the Agency-Level Financial Application System (SAKTI)., (2021).

Kholis, A., Husrizalsyah, D., & Pramana, A. (2020). Analysis of the Delone and Mclean Model on the Implementation of the Medan City Government Accounting Information System. MEA Scientific Journal (Management, Economics, and Accounting), 4(2), 116–128.

Krisdiantoro, Y., Subekti, I., & Prihatiningtias, YW (2019). The Effect of System Quality and Information Quality on Net Benefits with Usage Intensity as a Mediating Variable. Journal of Actual Accounting, 5(3), 261–279. https://doi.org/10.17977/um004v5i32019p261

Kurniawan, E. (2024). Green Accounting and Its Influencing Factors. Performance, 6(01), 038–045. https://doi.org/10.34005/kinerja.v6i01.3284

Kurniawan, IMWS, Dantes, GR, & Indrawan, G. (2020). Analysis of the Success of Implementing an Online Single Submission Application Using the Delone and Mclean Method. National Journal of Informatics Engineering Education (JANAPATI), 9(3), 326. https://doi.org/10.23887/janapati.v9i3.25087

Laudon, & L. (2000). Management Information Systems: Organization and Technology in the. Networked Enterpris.

Laudon, J. P., & Laudon, K. C. (2017). Management Information Systems: Managing The Digital Firm (15th ed.). Pearson.

Lutfi, A. (2023). Factors influencing the success of accounting information systems from the lens of DeLone and McLean IS model. International Journal of Information Management Data Insights, 3(2), 100202. https://doi.org/10.1016/j.jjimei.2023.100202

Manora, E., Maria, E., & Chernovita, HP (2021). Analysis of the Success of E-Performance Implementation in Salatiga City Using the DeLone-McLean Model. Building of Informatics, Technology and Science (BITS), 3(1), 16–25. https://doi.org/10.47065/bits.v3i1.1001

Mawarti, M., & Seprina, I. (2023). Analysis of the Success of the Academic Information System (Siakad) Using the Delone and Mclean Model (Case Study of Stihpada Palembang). JIPI (Scientific Journal of Informatics Research and Learning), 8(2), 393–406. https://doi.org/10.29100/jipi.v8i2.3462

Meilani, L., Suroso, AI, & Yuliati, LN (2020). Evaluation of the Success of Academic Information Systems Using the DeLone and McLean Model Approach. Journal of Business Information Systems, 10(2), 137–144. https://doi.org/10.21456/vol10iss2pp137-144

Midjan, L. (2015). Accounting Information System: A Practical Manual Approach to Developing Methods and Procedures. Accounting Information Institute.

Muhammad Hanif Ars Firdaus, & Zaldy Adrianto. (2024). Journal_Muhamammad+Hanif+Ars+F. Management Balance Sheet, Economics, 7(10).

Mulyadi. (2018). Cost Accounting. UPP STIM YKPN.

Musyaffi, AM, Khairunnisa, H., & Respati, DK (2022). Basic Concepts of Structural Equation Model-Partial Least Square (Sem-Pls) Using Smartpls. Pascal Books.

Nasrudin, E., & Widagdo, AK (2020). Determinants of User Satisfaction of Institution-Level Financial Application Systems and Their Impact on Individuals and Organizations. In Journal of Treasury Management (Vol. 1, Issue 1, pp. 69–94). https://doi.org/10.33105/jmp.v1i1.351

Nils Urbach and Benjamin Müller. (2012). The Updated DeLone and McLean Model of Information Systems Success. Springer, 28(May), 461. https://doi.org/10.1007/978-1-4419-6108-2

Noviyanti, N. (2017). MEASURING THE SUCCESS OF THE ACCRUAL-BASED AGENCY ACCOUNTING SYSTEM (SAIBA) USING THE DeLONE & McLEAN MODEL. Journal of State Financial Governance and Accountability, September, 151–173. https://doi.org/10.28986/jtaken.v2i2.62

Nugroho, HP, & Lestyowati, J. (2022). Analysis of the Level of Satisfaction and Interest of SAKTI Application Users with the PIECES Framework. Indonesian Treasury Review Journal of State Treasury and Public Policy, 5(2), 93–104.

Nur Asyifa, N. (2016). The Influence of System Quality, Information Quality, Service Quality, and Ease of Use on User Satisfaction of the Student Academic Information System (Siam) at Brawijaya University. 1–23.

Nurhalisa Khairani1, Rizka Ar Rahmah2, MA (2025). The Influence of Service Quality on User Satisfaction at Marpoken Delivery, Panyabungan District.

Parasuraman et al. (2019). The Behavioral Consequences of Service Quality. Prentice Hall.

Article 15 of Law Number 11 of 2008 concerning Electronic Information and Transactions (ITE).

Government Regulation Number 27 of 2014 Article 1 Paragraph 9 — Management of State/Regional Property.

Peter, P. and JO (1999). Consumer Behavior, Consumer Behavior and Marketing Strategy.

, volume 1. (4th Edition). erlangga.

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

Prasetiyo, D. (2003). Keywords: 2002.

Puspitasari, T., Kusumawati, A., & Sujarwoto, S. (2020). Application of the DeLone and McLean Model to Measure the Success of Research and Community Service Information Systems at Brawijaya University. Journal of Business Information Systems, 10(1), 94–104. https://doi.org/10.21456/vol10iss1pp94-104

Putra, RP, Wibowo, A., Farlina, Y., & Susilawati, D. (2022). Application of the Delone and Mclean Model to the Academic Information System Website of Sukabumi Health College. Swabumi, 10(1), 44–54. https://doi.org/10.31294/swabumi.v10i1.12255

Rahman, S., Hartanto, S., & Harkat, A. (2023). Analysis of the Implementation of the Agency-Level Financial Application System (SAKTI): A Case Study at the Semarang State Treasury Service Office I. Journal of Applied Accounting and Business, 3(1), 64–72. https://doi.org/10.25047/asersi.v3i1.3901

Rai, A., Lang, S.S., & Welker, R.B. (2002). Assessing the validity of IS success models: An empirical test and theoretical analysis. Information Systems Research, 13(1), 50–69. https://doi.org/10.1287/isre.13.1.50.96

Roky, H., & Meriouh, Y. Al. (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(0), 903–913. https://doi.org/10.1016/s2212-5671(15)00903-x

Romney, M.B., & Steinbart, P.J. (2018). Accounting Information Systems Fourteenth Edition. Pearson.

Sapty Rahayu, F., Apriliyanto, R., & Sigit Purnomo Wuryo Putro, Y. (2018). Analysis of the Success of the Student Information System (SIKMA) Using the DeLone and McLean Model Approach. Indonesian Journal of Information Systems, 1(1), 34–46. https://doi.org/10.24002/ijis.v1i1.1704

Sarstedt, M., Henseler, J., & Ringle, C. M. (2011). Multigroup analysis in partial least squares (PLS) path modeling: Alternative methods and empirical results. Advances in International Marketing, 22(January), 195–218. https://doi.org/10.1108/S1474-7979(2011)0000022012

Sarstedt, M., Ringle, C. M., & Hair, J. F. (2021). Partial Least Squares Structural Equation Modeling (Issue July). https://doi.org/10.1007/978-3-319-05542-8

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, 137(January), 104093. https://doi.org/10.1016/j.ijmedinf.2020.104093

Sihotang, JS (2020). The Influence of System Quality, Service Quality, and Information Quality on User Satisfaction of the Institution-Level Financial Application System

(Sakti). Journal of Business & Public Accounting, 11(1), 1–9.

Siregar, S. (2016). Descriptive Statistics for Research Equipped with Manual Calculations and SPSS Version 17 Application. PT Raja Grafindo Persada.

Sugiartini, P., & Tamamiyah, L. (2024). E-Government Initiatives in Indonesia as an Effort to Improve Public Services and Accountability. Action Research Literate, 8(4), 950–956. https://doi.org/10.46799/arl.v8i4.288

Sugiyono. (2008). Qualitative Quantitative Research Methods and R&D. ALFABETA.

Sugiyono. (2020). Business Research Methods. Quantitative, Qualitative, and R&D Approaches. Bandung: Alfabeta.

Suliyanto. (2014). Nonparametric statistics: in research statistics. Andi Offset.

Susanto, T.D., & Aljoza, M. (2015). Individual Acceptance of e-Government Services in a Developing Country: Dimensions of Perceived Usefulness and Perceived Ease of Use and the Importance of Trust and Social Influence. Procedia Computer Science, 72, 622–629. https://doi.org/10.1016/j.procs.2015.12.171

Tam, C., & Oliveira, T. (2016). Understanding the impact of m-banking on individual performance: DeLone & McLean and TTF perspective. Computers in Human Behavior, 61, 233–244. https://doi.org/10.1016/j.chb.2016.03.016

Tasyah, A., Lestari, PA, Syofira, A., Rahmayani, CA, Cahyani, RD, & Tresiana, N. (2021). Digital-Based Public Service Innovation (E-Government) in the Covid-19 Pandemic Era. Journal of Administrative Science: Media for the Development of Administrative Science and Practice, 18(2), 212–224. https://doi.org/10.31113/jia.v18i2.808

Turner, L., Weickgenannt, A., & Copeland, M. K. (2017). Accounting Information Systems Controls And Processes. Third Edition.

UMAROH, S., & BARMAWI, MM (2021). DeLone and McLean Model of Academic Information System Success. Electrotehnica, Electronica, Automatica, 69(2), 92–101. https://doi.org/10.46904/eea.21.69.2.1108011

Information and Electronic Transactions, (2008).

Law Number 25 of 2009 concerning Public Services.

Viontita, SC, & Mahendrawathi, ER (2024). Evaluation of Surabaya population administration & civil registration systems using DeLone & McLean information system success model. Procedia Computer Science, 234(2023), 1154–1163. https://doi.org/10.1016/j.procs.2024.03.111

Wahyuni, T. (2017). Empirical Test of the DeLone and McLean Model on the Success of the Regional Management Information System (SIMDA). BPPK Journal: Financial Education and Training Agency, 2(5), 3–24.

Wara, LS, Kalangi, L., & Gamaliel, H. (2021). Testing the DeLone and McLean Information System Success Model on the Audit Application System (SIAP) at the Republic of Indonesia Financial Audit Agency, North Sulawesi Province Representative Office. Journal of Accounting and Auditing Research "GOODWILL," 12(1), 1–15.

Widyaningrum, T., Sholihah, Q., & Haryono, BS (2024). The Delone and McLean Information System Success Model: Investigating User Satisfaction in Learning

DOI: https://doi.org/10.54443/sibatik.v5i2.4414

Management Systems. Journal of Educational Technology, 8(1), 86–94. https://doi.org/10.23887/jet.v8i1.71080

Wixom, B. H., & Todd, P. A. (2005). A theoretical integration of user satisfaction and technology acceptance. Information Systems Research, 16(1), 85–102. https://doi.org/10.1287/isre.1050.0042

Yapa, P.W.S., & Ukwatte, S. (2015). The New Public Financial Management (NPFM) and accrual accounting in Sri Lanka. Research in Accounting in Emerging Economies, 15(October 2014), 7–50. https://doi.org/10.1108/S1479-356320150000015002

Zulfan, Z. (2018). An Information System Success Model for Cloud Computing in Information Technology Project. Cyberspace: Journal of Information Technology Education, 2(1), 18. https://doi.org/10.22373/cs.v2i1.2661

DOI: https://doi.org/10.54443/sibatik.v5i2.4414