

Evaluation of Internal Management Information System Success at Indonesia's National Zakat Agency: A DeLone and McLean Model Approach

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ABSTRACT

Implementing Internal Management Information Systems (Intranets) varies in effectiveness across different organizations and is often influenced by system and information quality and utilization. This study evaluates the effectiveness of the Intranet system at Indonesia's National Zakat Collection Agency, employing the Information System Success Model developed by DeLone and McLean. A quantitative approach was employed using survey data from 206 employees, with 67 valid responses (response rate 32.5%). Structural Equation Modelling-Partial Least Squares (SEM-PLS) was used in this study to examine nine hypothesized relationships among system quality, information quality, service quality, use, user satisfaction, and net benefits. The analysis revealed that five hypotheses were supported: (1) information quality significantly influences user satisfaction ($\beta=0.335$, $p<0.005$), (2) service quality positively affects user satisfaction ($\beta=0.540$, $p<0.001$), (3) use significantly impacts net benefits ($\beta=0.326$, $p<0.005$), (4) use positively influences user satisfaction ($\beta=0.762$, $p<0.001$), and (5) user satisfaction significantly affects net benefits ($\beta=0.538$, $p<0.001$). Four hypotheses were rejected, indicating non-significant relationships between information quality-use, service quality-use, system quality-use, and system quality-user satisfaction. The findings suggest that the Intranet's success is primarily driven by user satisfaction and system usage rather than technical aspects. Management should improve user experience and promote system utilization to enhance organizational benefits.

Keywords: Information Systems Evaluation, DeLone and McLean Model, Zakat Management, User Satisfaction, System Success.

INTRODUCTION

Established under the 2011 Constitution Number 20, which governs national zakat management, the National Zakat Collection Agency (BAZNAS) functions under the supervision of a minister and reports directly to the president. BAZNAS implemented its Internal Management Information System (IMIS) in 2014. This system was designed to enhance employees' daily performance and improve services for donors, recipients, and distributors. Its ultimate aim is to accurately target and elevate the economic conditions of the disadvantaged, aligning with the agency's non-profit nature that focuses on collecting, distributing, and managing zakat effectively.

Despite its critical role, the current implementation of the IMIS has proven to be neither effective nor efficient. Issues identified include limited maintenance capabilities, restricted access, unstable connectivity affecting timely operations, and a lack of necessary employee training on effectively using the management information system. Given its scope, which spans national and international operations, the system requires substantial capacity to support the agency's extensive data needs. Despite being partly operational with auxiliary support from external systems like Looke Data Studio, which integrates tools like Gform and Google spreadsheets for data processing and website integration, the existing IMIS does not fully support operational needs. This setup is crucial as the agency handles large volumes of data daily, which can overwhelm the network or the applications involved.

Evaluating the IMIS is crucial for organizations, particularly in non-profit sectors such as BAZNAS. The success of such systems directly influences operational efficiency and decision-making processes, which are vital for effective zakat management and distribution. The IMIS at BAZNAS is integral to managing significant financial transactions and aid distribution to needy people. Therefore, it is essential that the system not only functions effectively from a technological standpoint but also meets the expectations and needs of its users. Prior research indicates that user satisfaction and system usage are critical indicators of an information system's success (Mulyani, Suroso, & Hasanah, 2023). By focusing on these aspects, this study aims to uncover how the IMIS impacts the agency's operations and the satisfaction of its employees.

The necessity for a thorough evaluation is underscored by the variability in success factors observed in similar systems across different organizational contexts. Factors influencing success can differ significantly based on internal and external environments, highlighting the importance of tailored evaluations (Amalina & Suryani, 2022; Son, Hwang, Kim, & Cho, 2016). Previous studies have emphasized the interplay between technical attributes of information systems and human factors, such as user satisfaction and utilization rates, in determining overall effectiveness (Dewi, Suprasto, Dwirandra, & Putri, 2021; Ojo, 2017).

Utilizing Structural Equation Modelling-Partial Least Squares (SEM-PLS), this research investigates the relationships posited in the DeLone and McLean model, specifically adapted to the operational context of BAZNAS. The model encompasses multiple dimensions of success, including system quality, information quality, service quality, user satisfaction, usage, and net benefits, providing a comprehensive approach to evaluation (Rahayu & Setiyani, 2022; Ritchi, Irawan, Adrianto, & Aprilianisa, 2023; Sologia, Witjaksono, & Ramadani, 2024). This methodological approach allows for a nuanced understanding of the IMIS's effectiveness within the unique institutional and cultural framework of the zakat agency (Dang, Zhang, & Chen, 2018; Hermawan, 2019; Karitis, Gallos, Triantafyllou, & Plagianakos, 2021).

By analyzing the interdependencies among the model's dimensions, the study aims to provide actionable insights that can inform future improvements to the IMIS, ultimately enhancing its contribution to the agency's mission. This study not only contributes to the academic discourse on information systems in non-profit organizations but also provides practical recommendations for enhancing the operational capabilities of BAZNAS.

LITERATURE REVIEW

Indonesia's National Zakat Agency

Zakat, a fundamental pillar of Islam, plays a critical role in fostering social equity and alleviating poverty, particularly in Indonesia, which has the largest Muslim population globally. The management of zakat in Indonesia has evolved significantly since the establishment of the National Zakat Agency (BAZNAS) in 2001, which was created to streamline the collection and distribution of zakat across the nation. This transformation was necessitated by earlier regulatory frameworks, such as Presidential Decree No. 07/point/10/1968, which allowed for the establishment of zakat amil agencies but resulted in inconsistencies in zakat management due to its limited scope (As-Salafiyah & Fatoni, 2021; Wahyu et al., 2023). The subsequent Presidential Decree No. 8 of 2001 marked a pivotal shift, establishing BAZNAS as a national entity responsible for zakat management, addressing previous limitations, and ensuring a more organized system (Chotib, 2023; Mokodenseho et al., 2024).

In Indonesia, zakat organizations are categorized into two main types: the Zakat Agency (BAZ) and the Zakat Institution (LAZ). BAZ is a government-formed agency operating under the president's auspices, while LAZ is a community-formed organization authorized to operate at various levels, including internationally (Febriandika, Dilla, & Yayuli, 2023). BAZNAS has developed an extensive network comprising 34 provincial offices and numerous regency/city offices, enabling effective zakat distribution nationally and internationally (Herianingrum et al., 2023). This structured approach is crucial for ensuring that zakat reaches those in need, particularly vulnerable populations such as people experiencing poverty and orphans (Herianingrum et al., 2023; Mokodenseho, 2024).

The primary objective of BAZNAS is to create a modern and efficient Zakat management system that enhances transparency and accountability. To achieve this, BAZNAS has prioritized the development of a national zakat management system that leverages technology for improved efficiency. This technological integration is vital for enhancing the effectiveness of zakat distribution, ensuring that assistance is targeted and impactful (Herianingrum

et al., 2023; Chotib, 2023; Mokodenseho, 2024). Furthermore, BAZNAS aims to raise awareness among affluent Muslims regarding their zakat obligations, fostering a culture of giving and social responsibility (Kholis & Mugiyati, 2021).

The establishment of BAZNAS has significantly impacted societal welfare in Indonesia, contributing to poverty alleviation and social justice (Kholis & Mugiyati, 2021), which aligns with the values of Pancasila, the foundational philosophical theory of the Indonesian state (Chotib, 2023). By facilitating zakat collection and distribution, BAZNAS has positioned itself as a key player in addressing social inequities and enhancing community welfare (Mokodenseho, 2024). The ongoing commitment to improving zakat services through technological advancements will be essential for BAZNAS's future success in meeting the diverse needs of Indonesia's population (Herianingrum et al., 2023).

The evolution of zakat management in Indonesia, mainly through the establishment of BAZNAS, represents a significant advancement in the country's efforts to enhance social welfare and promote equity. By adopting a systematic and modern approach to zakat collection and distribution, BAZNAS has become a crucial instrument in the fight against poverty and social injustice, demonstrating the potential of zakat as a powerful tool for socio-economic empowerment within the Muslim community.

Application of DeLone and McLean Approach

Recent scholarly efforts have further expanded and validated the DeLone and McLean Information Systems Success Model (2003), adapting it to diverse contexts and integrating it with other theoretical frameworks to enhance its applicability and explanatory power across various domains and geographies.

Aldholay et al. (2018) extended the original DeLone and McLean model (2003) by incorporating self-efficacy as a precursor to user satisfaction and system usage, focusing on the educational sector in Yemen. Their study surveyed higher education students and demonstrated that self-efficacy significantly boosts user satisfaction and system usage, supporting the model's adaptability and relevance in addressing educational challenges in developing countries. Thongsri et al. (2019) applied the model to assess Thailand's ClassStart online learning platform. Their methodological approach centered on evaluating service quality, user satisfaction, and net benefits through student surveys. Their findings highlighted the importance of service quality and user satisfaction as critical predictors of net benefits, affirming the model's effectiveness in evaluating e-learning systems.

Cheng (2019) developed a hybrid model that combined the DeLone and McLean (2003) framework with theories of user continuance intention, targeting cloud ERP systems. The study found that system and information quality are crucial for fostering user satisfaction, directly influencing continuance intentions among ERP users. Mustafa et al. (2020) creatively merged Tan's failure model with the DeLone and McLean framework to explore digital service failures. By gathering data from users who experienced such failures, their findings highlighted the pivotal roles of information quality and user satisfaction in mitigating the negative impacts of service failures. Alotaibi and Alshahrani (2022) extended the model to evaluate e-learning platforms, emphasizing the impact of system and information quality on user satisfaction. Based on student surveys, their research showed that high-quality systems and reliable information enhance user satisfaction and platform success.

Bashiri et al. (2023) focused on Iran's Electronic Health Record System, evaluating system quality, information quality, and user satisfaction. Data collected from healthcare professionals and system users indicated that high system and information quality significantly enhanced user satisfaction, contributing to the overall success of the healthcare information system. Ikenyei and Haggerty (2024) validated the DeLone and McLean model in the context of infectious disease pandemics in a developing country. The research adapted the model's dimensions to fit the unique challenges posed by health crises, illustrating the model's flexibility in different situational contexts.

These studies collectively reinforce the robustness of the DeLone and McLean model, showcasing its flexibility to be adapted and extended across various types of information systems and user contexts, including BAZNAS, ultimately contributing to a deeper understanding of the determinants of IS success.

METHODS

This study employs a quantitative approach with a cross-sectional survey design to test the DeLone and McLean IS Success Model (2003) in the context of the National Zakat Agency's Intranet system. Figure 1 illustrates the adapted

DeLone and McLean Model (2003), which includes system quality, information quality, service quality, usage, user satisfaction, and net benefits. All of the six constructs were adopted in this study to develop nine hypothesized relationships.

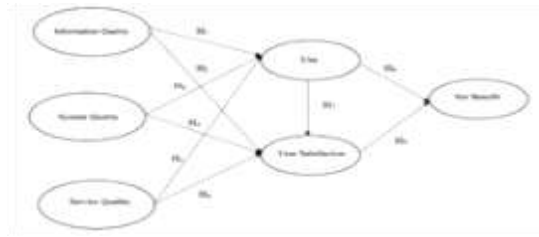


Figure 1. IS Success Model Delone and Mclean (2003)

The quality of a system is a critical determinant of its success, characterized by its ability to meet user expectations and effectively serve its intended purpose. System quality refers to how well a system functions to meet user needs, and it can be assessed through various indicators such as system speed, accuracy of responses, ease of use, timeliness, and the overall capacity of the system to support performance. According to Sari, Ervianingsih, and Zahran (2023), these indicators collectively ensure that a system is functional and relevant to its users.

Moreover, information quality is integral to a system's success, reflecting its capacity to deliver complete, accurate, and reliable data. Hariyanto (2021) emphasizes that this involves adherence to predefined standards and adapting to evolving requirements. Indicators such as clarity, effectiveness, efficiency, and support infrastructure (e.g., robust networks and up-to-date facilities) are crucial. A high-quality information system minimizes errors and prevents misinformation, ensuring users can rely on its outputs.

The role of human resources in system success cannot be understated. Effective human resource management, built on trust, appropriate expectations, and a focus on customer satisfaction, is essential. Service quality indicators enhance user satisfaction, including adequate infrastructure, reliable services, and trust-building measures. Training—its type, content, and delivery—is another key factor that supports service quality, as skilled personnel are better equipped to manage and utilize the system effectively (Admaja & Febian, 2015).

The interplay between system and human resource factors extends to the system's usability. Usability includes user-friendly features that simplify operations and are supported by qualified human resources knowledgeable in information systems or technology. Additional aspects such as fair compensation, initiative, responsibility, loyalty, and wisdom further contribute to the effective use and management of the system. These factors foster motivation and a high level of engagement, which are vital for the emergence of a high-quality system.

The success of a system is ultimately contingent upon its alignment with user needs and expectations. User initiatives and factors such as adaptability, comfort, and comprehensive design are instrumental in ensuring the system meets its objectives. A well-rounded approach that integrates technical excellence, human resource development, and a focus on user-centric design is essential for a system to achieve its intended outcomes. This holistic perspective reinforces that system quality and success are interdependent and require collaboration between technology and human users.

The population of this study consists of 206 employees at the National Zakat Agency of Indonesia. Using Slovin's formula with a 10% margin of error, the minimum required sample size was calculated as 67 respondents: $n = N / (1 + Ne^2)$ $n = 206 / (1 + 206(0.1)^2)$ $n = 67.32 \approx 67$ respondents. The study employed stratified random sampling to ensure proportional representation across different organizational levels and departments. The questionnaires were developed based on validated scales from previous studies. All items were measured using a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree). The instrument was pre-tested with 30 respondents to assess reliability and validity. Data was collected over two months in 2024 using an online survey platform. The response rate was 32.5% (67 valid responses from 206 distributed questionnaires).

The partial least squares-structural equation modeling (PLS-SEM) was used for data analyses due to its suitability for smaller sample sizes while effectively confirming the quality of measurement models and analyzing causal-predictive relationships among variables (Chin et al., 2020; Hair, Page, & Brunsveld, 2020). PLS-SEM was explicitly

utilized to assess the measurement model (outer model), structural model (inner model), and hypothesis testing. Construct validity was determined through convergent validity, indicated by loading values and Average Variance Extracted (AVE) greater than 0.5, and discriminant validity, where the square root of AVE exceeded the inter-construct correlations. Reliability was evaluated using Cronbach's Alpha, with a threshold of > 0.7 (Supriyanto & Maharani, 2012). The structural model (inner model) was assessed using measures of goodness of fit, including the coefficient of determination (R-square or R^2), which reflects the influence of exogenous variables on endogenous variables. Hypotheses were accepted based on p-values < 0.05 (Narimawati, Sarwono, Affandi, & Priadana, 2020).

RESULTS AND DISCUSSION

Measurement Model Assessment

Table 1 shows that the indicators used to measure the variables in this study exhibit loading values greater than 0.6 and an AVE exceeding 0.5, confirming that the items effectively converge on their respective latent constructs. Additionally, both Cronbach's Alpha and Composite Reliability (CR) values for all variables are above 0.7, indicating sufficient reliability and strong internal consistency. Moreover, the discriminant validity test shows that the square root of the AVE for each variable surpasses the correlation values among other constructs, confirming that all constructs are valid and meet the criteria for discriminant validity.

Table 1. Convergent Validity, Composite Reliability, and Discriminant Validity

Constructs	Item	Loading Factor	AVE	Cronbach's Alpha	Composite Reliability	Discriminant Validity
System Quality (QS)			0.78			0.885
	QS1	0.938	4	0.837	0.926	
	QS2	0.899				
	QS3	0.841				
	QS4	0.864				
Information Quality (IQ)			0.67			0.882
	IQ1	0.840	6	0.803	0.871	
	IQ2	0.826				
	IQ3	0.807				
	IQ4	0.854				
	IQ5	0.858				
	IQ6	0.745				
Service Quality (SQ)			0.65			0.843
	SQ1	0.843	1	0.808	0.903	
	SQ2	0.797				
	SQ3	0.828				
	SQ4	0.810				
	SQ5	0.764				
Actual Usage (U)	U1	0.839	0.71	0.843	0.935	0.863
	U2	0.883				
	U3	0.804				
User Satisfaction (US)			0.74			0.807
	US1	0.832	5	0.851	0.880	
	US2	0.906				
	US3	0.850				
Net Benefit (NB)			0.69			0.833
	NB1	0.852	3	0.840	0.898	
	NB2	0.801				
	NB3	0.849				

Structural (Inner) Model Analysis

The evaluation of the inner model highlights the explanatory power of the variables within the structural model. The Net Benefit construct exhibits an R-Square value of 0.671, which signifies that Use and User Satisfaction effectively account for 67.1% of the variability in the Net Benefit construct. This robust power means that the degree to which the system delivers value (e.g., efficiency, effectiveness, or other measurable outcomes) can be primarily attributed to how the system is used and how satisfied users are with it. However, the remaining 32.9% of the variability is influenced by external factors not addressed in this study. These could include organizational culture, economic conditions, or individual user characteristics, suggesting potential areas for further investigation to understand better what drives net benefits.

The Use construct, with an R-Square value of 0.166, indicates that only 16.6% of its variance is explained by the constructs Information Quality, System Quality, and Service Quality. This relatively low explanatory power suggests that while these factors play a role in influencing system use (e.g., ease of use, availability of support, and system reliability), a significant 83.4% of the variance is determined by factors outside the study's scope. Additional influences could include user motivation, training, external pressures, or other system-related characteristics such as accessibility or integration with other tools.

The User Satisfaction construct shows a substantial R-Square value of 0.707, which implies that 70.7% of its variance is explained by Information Quality, System Quality, Service Quality, and Use. This finding demonstrates that the perceived quality of the system's information output, functional capabilities, the support provided, and the extent of its utilization substantially contribute to user satisfaction. However, the remaining 29.3% of the variability is left unexplained, suggesting the influence of other factors like user expectations, individual preferences, or external feedback mechanisms not included in the study.

Hypotheses Testing Results

The hypotheses tests show the nuanced relationships among information quality, service quality, system quality, use, user satisfaction, and net benefits. This study revealed a mix of hypotheses' acceptance and rejections. As indicated in Table 2, the rejected hypotheses include H1, H3, H5, and H6.

Hypothesis H1, which proposed a positive relationship between information quality and use, was rejected, as the P-value (0.549) indicated insignificance despite a positive original sample value (0.191). Previous studies have indicated that while information quality is essential, it does not always lead to increased usage, as other factors, such as user experience and service quality, may play a more critical role in influencing usage patterns. Johnson et al. (2016) suggest that information quality evaluation encompasses various attributes, including content and relevance, which may not directly translate into usage. Similarly, Zhenyu's (2023) study shows that perceived usefulness and reciprocity are more significant determinants of information sharing than quality alone.

For H3, service quality did not significantly affect use (P-value 0.229, original sample 0.247), leading to the rejection of the hypothesis. This finding suggests that the quality of service delivery might not be a direct driver of system use. Instead, perceived ease of use could overshadow service quality and influence user behavior. The literature indicates that user satisfaction and engagement are often more closely linked to ease of use than the quality of service provided (Andwika & Witjaksono, 2020). Furthermore, the importance of individual factors and management support in determining the effectiveness of information systems may be more influential than service quality alone (Mkonya, Jintian, Nanthuru, & Jinyevu, 2018).

H5, which linked system quality to use, was rejected (P-value 0.892, original sample 0.032), suggesting system quality lacks a direct influence on these factors. This finding suggests that users may not prioritize system quality (e.g., performance, interface design) when determining usage. Instead, other factors, such as perceived usefulness and ease of use, might take precedence (Li, Zhu, & Li, 2022). Furthermore, the effectiveness of enterprise resource planning systems is influenced more by user perception and organizational factors than by system quality alone (Wibowo & Widya Sari, 2018).

Finally, H6 (system quality to user satisfaction) was rejected with similar findings (P-value 0.410, original sample - 0.115), suggesting that system quality may not directly influence user satisfaction (Li et al., 2022), highlighting potential gaps in expectations versus performance.

Table 2. Path coefficient of direct effects

<i>Hypotheses</i>	<i>Path Coefficients</i>	<i>Original Sample</i>	<i>Sample Mean</i>	<i>T Statistics</i>	<i>STDEV</i>	<i>P Value</i>	<i>Decision</i>
H1	IQ → U	0.191	0.191	0.600	0.319	0.549	Rejected
H2	IQ → US	-0.335	-0.330	2.092	0.150	0.037	Accepted
H3	SQ → U	0.247	0.253	1.204	0.205	0.229	Rejected
H4	SQ → US	0.540	0.552	3.346	0.161	0.001	Accepted
H5	QS → U	0.032	0.048	0.135	0.239	0.892	Rejected
H6	QS → US	-0.115	-0.119	0.824	0.139	0.410	Rejected
H7	U → NB	0.326	0.320	2.173	0.150	0.030	Accepted
H8	U → US	0.762	0.752	8.196	0.093	0.000	Accepted
H9	US → NB	0.538	0.541	3.845	0.140	0.000	Accepted

As shown in Table 2, five hypotheses, H2, H4, H7, H8, and H9, are accepted. Hypothesis H2, positing a positive impact of information quality on user satisfaction, was accepted with a significant P-value (0.037) and a negative original sample (-0.335), demonstrating a complex influence where higher information quality enhances satisfaction despite its directionality. This finding aligns with findings emphasizing Information Quality's importance in enhancing user satisfaction (Maesaroh, Haddow, Kholis, & Mujib, 2024; Nurhayati, Umiyarni P, & Syafe'i, 2019). This finding highlights the importance of information quality for user satisfaction, suggesting that users value information accuracy, relevance, and comprehensiveness (Kusuma, Suarti, & Fitri, 2024).

H4 established a significant and positive relationship between service quality and user satisfaction (P-value 0.001, original sample -0.540), supporting the hypothesis. This finding underscores service quality's critical role in satisfaction. High service quality appears to influence user satisfaction positively. However, the negative coefficient suggests dissatisfaction with certain aspects of the service, such as responsiveness or reliability. This finding is consistent with the literature, which posits that Service Quality directly influences user satisfaction levels (Nidiacitra & Gede Sri Darma, 2023) in terms of meeting their needs and supporting the daily activities of employees (Suardika, Candiasa, & Divayana, 2024).

Furthermore, H7 indicated a significant and positive relationship between use and net benefits (P-value 0.030, original sample 0.326), demonstrating that increased use directly enhances perceived benefits. Increased system use positively influences the perceived net benefits, such as efficiency and productivity. This finding aligns with previous studies highlighting the positive correlation between system use and perceived net benefits (Ameylda & Djamaludin, 2022; Lestari, Kurniawan, & Usino, 2019). Thus, it is critical to increase the use of the system so that users can potentially experience net benefits.

Similarly, H8 showed a robust, significant relationship between use and user satisfaction (P-value 0.000, original sample 0.762), emphasizing use's pivotal role in satisfaction. Frequent use correlates with higher satisfaction levels, likely due to familiarity and perceived utility. This finding supports that higher engagement with a system enhances user satisfaction (Nidiacitra & Gede Sri Darma, 2023). User satisfaction may even improve when the system is convenient and practical. The literature supports this assertion, indicating that user satisfaction is often a function of the perceived ease of use and the overall user experience with the system. For instance, the Technology Acceptance Model (TAM) emphasizes that perceived ease of use and usefulness significantly influence user satisfaction and technology acceptance (Johnson et al., 2016). Furthermore, studies have shown that systems that facilitate user tasks and provide a seamless experience tend to yield higher satisfaction rates (Zhenyu, 2023).

Finally, H9 confirmed a significant and positive link between user satisfaction and net benefits (P-value 0.000, original sample 0.538), highlighting satisfaction as a critical determinant of overall benefits. Satisfied users perceive more significant benefits from system use, including task efficiency and organizational value. This finding aligns with findings that suggest user satisfaction is a critical determinant of perceived net benefits (Ameylda & Djamaludin, 2022; Lestari et al., 2019). When users are satisfied with the intranet system, they will have more benefits. The relationship between user satisfaction and perceived net benefits can be understood through the lens of the DeLone and McLean Information Systems Success Model, which posits that user satisfaction is a key outcome of system

quality, information quality, and service quality, ultimately leading to perceived net benefits (Andwika & Witjaksono, 2020).

These findings collectively provide valuable insights into system design and strategic decision-making, highlighting key factors that drive user satisfaction and perceived benefits. It is suggested that the Internal of the National Zakat Amil Agency of the Republic of Indonesia maintains information quality and improves the usability and accessibility of the system to guarantee user satisfaction and benefits.

CONCLUSION

This study aimed to evaluate the effectiveness of the Internal Management Information System at the National Zakat Agency of the Republic of Indonesia using the DeLone and McLean Information Systems Success Model. The current study yields key findings, offering insights into the relationships between system quality, user satisfaction, and net benefits. First, users highly value information accuracy, relevance, and comprehensiveness, highlighting the critical role of information quality in enhancing user satisfaction. Second, high service quality is essential for user satisfaction, suggesting that the Intranet maintains providing and improving service quality. Third, increased system use significantly enhances perceived net benefits, such as productivity and efficiency, highlighting the importance of encouraging frequent system use to maximize benefits. Fourth, frequent system use fosters higher satisfaction through familiarity and utility. Finally, user satisfaction directly increases net benefits, highlighting satisfaction as a cornerstone of organizational value and task efficiency.

This study offers some practical recommendations. Upgrading the system's technical infrastructure is essential to enhance the quality and quantity of system services and ensure uninterrupted operations, including adding RAM, expanding server capacity, and updating applications or platforms. These improvements will reduce disruptions, increase efficiency, and enable faster internal use of the intranet system. Furthermore, in-depth training sessions on Information Systems (IS) and Information Technology (IT) should be conducted to boost system usage and user satisfaction. These training programs should be designed to meet the workforce's specific needs, enabling employees to fully utilize the system's capabilities and increasing their proficiency and confidence in its use.

In addition, the quality of information provided through the application or platform must be improved. Efforts should ensure employees can easily access and connect with relevant information by aligning the content with user needs and preferences. Paying close attention to the information criteria required by system users will help foster better communication and collaboration across the organization. These combined efforts will significantly optimize the intranet system's performance and user satisfaction.

The Internal Management Information System evaluation at the National Zakat Agency of the Republic of Indonesia using the DeLone and McLean Information Systems Success Model showed that the question items and indicators significantly influenced the evaluation outcomes. Thus, it is important to refine and expand the indicators to ensure a comprehensive measurement of the variables related to the system's success. A more detailed exploration of these indicators is recommended to enhance the evaluation process and provide a clearer understanding of the system's effectiveness.

The intranet system supports employees' work and can be enhanced with a more robust and versatile tool by incorporating additional features. These enhancements would enable the system to better cater to user needs by focusing exclusively on the primary application, eliminating reliance on multiple applications. This approach would improve consistency and streamline functionality, ensuring a more cohesive and efficient user experience. These measures would significantly contribute to optimizing the Intranet's role in supporting organizational goals and improving employee productivity.

REFERENCES

- [1]. Admaja, S., & Febian, A. (2015). Analisis Kesuksesan Sistem Informasi Manajemen Sumber Daya Dan Perangkat Pos Dan Informatika (SIMS). *Buletin Pos Dan Telekomunikasi*, 12(2), 109–118. <https://doi.org/10.17933/bpostel.2014.120203>.

- [2]. Aldholay, A. H., Isaac, O., Abdullah, Z., Abdulsalam, R., & Al-Shibami, A. H. (2018). An Extension of Delone and McLean IS Success Model With Self-Efficacy. *International Journal of Information and Learning Technology*, 35(4), 285–304. <https://doi.org/10.1108/ijilt-11-2017-0116>
- [3]. Alotaibi, R. S., & Alshahrani, S. M. (2022). An Extended Delone and Mclean's Model to Determine the Success Factors of E-Learning Platform. *PeerJ Computer Science*, 8(e876). <https://doi.org/10.7717/peerj-cs.876>
- [4]. Amalina, D., & Suryani, E. (2022). Evaluating the Success of E-Invoice Implementation at a State-Owned Enterprise Using DeLone & McLean IS Success Model. *IPTEK Journal of Proceedings Series*, 0(1), 388. <https://doi.org/10.12962/j23546026.y2020i1.11937>
- [5]. Ameylda, N., & Djamaludin, Moh. D. (2022). Satisfaction Levels of Ipb Undergraduate Students Toward Online Learning Services During the Covid-19 Pandemic. *Journal of Child, Family, and Consumer Studies*, 1(1), 35–47. <https://doi.org/10.29244/jcfcs.1.1.35-47>
- [6]. Andwika, V. R., & Witjaksono, R. W. (2020). Analysis of User Acceptance of ERP System on After Sales Function Using Unified Theory of Acceptance and Use of Technology (UTAUT) Model. *International Journal of Advances in Data and Information Systems*, 1(1), 26–33. <https://doi.org/10.25008/ijadis.v1i1.178>
- [7]. As-Salafiyah, A., & Fatoni, A. (2021). Zakat Policy and Regulation: A Review. *Islamic Social Finance*, 1(1). <https://doi.org/10.58968/isf.v1i1.106>
- [8]. Bashiri, A., Shirdeli, M., Niknam, F., Naderi, S., & Zare, S. (2023). Evaluating the Success of Iran Electronic Health Record System (SEPAS) Based on the DeLone and McLean Model: A Cross-Sectional Descriptive Study. *BMC Medical Informatics and Decision Making*, 23(1), 10. <https://doi.org/10.1186/s12911-023-02100-y>
- [9]. Cheng, Y. (2019). A Hybrid Model for Exploring the Antecedents of Cloud ERP Continuance. *International Journal of Web Information Systems*, 15(2), 215–235. <https://doi.org/10.1108/ijwis-07-2018-0056>
- [10]. Chin, W., Cheah, J.-H., Liu, Y., Ting, H., Lim, X.-J., & Cham, T. H. (2020). Demystifying the role of causal-predictive modeling using partial least squares structural equation modeling in information systems research. *Industrial Management & Data Systems*, 120(12), 2161–2209. (world). <https://doi.org/10.1108/IMDS-10-2019-0529>
- [11]. Chotib, M. (2023). Establishing a Zakat Culture Based on Good Zakat Governance and Good Zakat Empowerment in Indonesia. *Journal of Islamic Economics Perspectives*, 5(2), 1–11. <https://doi.org/10.35719/jiep.v5i2.121>
- [12]. Dang, M. Y., Zhang, G. Y., & Chen, H. (2018). Adoption of Social Media Search Systems: An IS Success Model Perspective. *Pacific Asia Journal of the Association for Information Systems*, 10(2), 55–78. <https://doi.org/10.17705/1pais.10203>
- [13]. 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>
- [14]. Dewi, N. W. S. C., Suprasto, H. B., Dwirandra, A. A. N. B., & Putri, I. G. A. M. A. D. (2021). Implementation of The Tri Hita Karana Culture In Delone And Mclean Models To Assess The Success of Using Accounting Information Systems. *Journal of Economics, Finance And Management Studies*, 04(11), 2082–2092. <https://doi.org/10.47191/jefms/v4-i11-02>
- [15]. Febriandika, N. R., Dilla, G. K., & Yayuli, Y. (2023). Zakat Compliance Behavior in Formal Zakat Institutions: An Integration Model of Religiosity, Trust, Credibility, and Accountability. *International Journal of Advanced and Applied Sciences*, 10(6), 187–194. <https://doi.org/10.21833/ijaas.2023.06.022>
- [16]. Hair, J. F., Page, M., & Brunsveld, N. (2020). *The Essentials of Business Research Methods* (Fourth edition). New York ; London: Routledge, Taylor & Francis Group.
- [17]. Hariyanto, W. (2021). Optimalisasi Kepuasan Pengguna Sistem Informasi Perpustakaan Melalui Teori Delone Mclean. *LibTech: Library and Information Science Journal*, 1(2). <https://doi.org/10.18860/libtech.v1i2.11922>
- [18]. Herianingrum, S., Supriani, I., Sukmana, R., Effendie, E., Widiastuti, T., Fauzi, Q., & Shofawati, A. (2023). Zakat as an Instrument of Poverty Reduction in Indonesia. *Journal of Islamic Accounting and Business Research*, 15(4), 643–660. <https://doi.org/10.1108/jiabr-11-2021-0307>
- [19]. Hermawan, H. (2019). Successful Implementation of Enterprise Resource Planning. *The Winners*, 20(1), 19. <https://doi.org/10.21512/tw.v20i1.5359>

- [20]. Ikenyei, U., & Haggerty, N. (2024). Validating the Delone and Mclean's Model in a Developing Country's Infectious Disease Pandemic Context. *BMC Infectious Diseases*, 24(1), 594. <https://doi.org/10.1186/s12879-024-09483-x>
- [21]. Johnson, F., Rowley, J., & Sbaffi, L. (2016). Exploring Information Interactions in the Context of Google. *Journal of the Association for Information Science and Technology*, 67(4), 824–840. <https://doi.org/10.1002/asi.23443>
- [22]. Karitis, K., Gallos, P., Triantafyllou, I. S., & Plagianakos, V. (2021). Chios Hospital Information System Assessment. In J. Delgado, A. Benis, P. De Toledo, P. Gallos, M. Giacomini, A. Martínez-García, & D. Salvi (Eds.), *Studies in Health Technology and Informatics*. IOS Press. <https://doi.org/10.3233/SHTI210837>
- [23]. Kholis, N., & Mugiyati, M. (2021). Distribution of Productive Zakat for Reducing Urban Poverty in Indonesia. *International Journal of Innovation, Creativity and Change*, 15(3), 1–12. <https://doi.org/10.53333/IJICC2013/15303>
- [24]. Kusuma, A. T., Suarti, A. R., & Fitri, E. (2024). Pengaruh Ease of Use Dan Information Quality Terhadap Repurchase Intention Pengguna Aplikasi Grabfood Di Kota Mataram. *JSEH (Jurnal Sosial Ekonomi dan Humaniora)*, 10(3), 394–401. <https://doi.org/10.29303/jseh.v10i3.589>
- [25]. Lestari, S. D., Kurniawan, F., & Usino, W. (2019). ERP System Success Analysis Based on SAP Applications Using Success System Information Model: Case Study PT. Adelphi Transasia Indonesia. Presented at the Proceedings of the 1st Workshop on Multidisciplinary and Its Applications Part 1, WMA-01 2018, 19-20 January 2018, Aceh, Indonesia, Aceh, Padang, Jakarta, Indonesia. Aceh, Padang, Jakarta, Indonesia: EAI. <https://doi.org/10.4108/eai.20-1-2018.2281885>
- [26]. Li, Z., Zhu, J., & Li, X. (2022). Factors influencing the behavior of multi-modal information search. *Library Hi Tech*, 40(5), 1459–1482. <https://doi.org/10.1108/LHT-11-2020-0288>
- [27]. Maesaroh, I., Haddow, G., Kholis, N., & Mujib, A. (2024). Librarian Expertise, Responsiveness, and Virtual Reference Service Quality: Do Communication Channels Matter? *TEM Journal*, 13(3), 2036–2045. <https://doi.org/10.18421/TEM133-31>
- [28]. Mkonya, V. L., Jintian, Y., Nanthuru, S. B., & Jinyevu, S. A. (2018). Analysis of Top Management Support and Individual Factors Influence on Accounting Information System and its Impact on the Accounting Information Quality for Projects. *International Journal of Management Science and Business Administration*, 4(3), 19–29. <https://doi.org/10.18775/ijmsba.1849-5664-5419.2014.43.1003>
- [29]. Mokodenseho, S., Paputungan, P., Paputungan, A., Modeong, N., Manggo, T., Kobandaha, S., ... Imban, Y. (2024). The Strategic Role of Zakat Management in Socio-Economic Empowerment of the Ummah. *WSiSS*, 2(02), 114–120. <https://doi.org/10.58812/wsiss.v2i02.821>
- [30]. Mulyani, M., Suroso, A. I., & Hasanah, N. (2023). Success Factors of Task Management Application in The Business Service Division of PT Telkom Indonesia. *Indonesian Journal of Business and Entrepreneurship*, 9(3), 432. <https://doi.org/10.17358/ijbe.9.3.432>
- [31]. Mustafa, S. Z., Kar, A. K., & Janssen, M. (2020). Understanding the Impact of Digital Service Failure on Users: Integrating Tan's Failure and DeLone and McLean's Success Model. *International Journal of Information Management*, 3, 102119. <https://doi.org/10.1016/j.ijinfomgt.2020.102119>
- [32]. Narimawati, U., Sarwono, J., Affandi, A., & Priadana, M. S. (2020). *Ragam Analisis Dalam Metode Penelitian: Untuk Penulisan Skripsi, Tesis, & Disertasi*. Andi Offset. Retrieved from <https://books.google.co.id/books?id=bEYMEAAQBAJ>
- [33]. Nidiacitra, L. & Gede Sri Darma. (2023). Menakar Digital Customer Service Machine Menggunakan Human Organization Technology Model. *Jurnal Ekonomi*, 28(3), 426–444. <https://doi.org/10.24912/je.v28i3.1794>
- [34]. Nurhayati, S., Umiyarni P, D., & Syafe'i, M. (2019). A Success Model of E-Health Implementation in the Service Area of Department of Health of Banyumas Regency Indonesia. *Annals of Tropical Medicine and Public Health*, 22(11), 310–315. <https://doi.org/10.36295/ASRO.2019.221140>
- [35]. Ojo, A. I. (2017). Validation of the DeLone and McLean Information Systems Success Model. *Healthcare Informatics Research*, 23(1), 60. <https://doi.org/10.4258/hir.2017.23.1.60>
- [36]. Rahayu, D. N., & Setiyani, L. (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>

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- [37]. Ritchi, H., Irawan, A., Adrianto, Z., & Aprilianisa, W. (2023). A Study of Efficacy of Information Systems and Performance Accountability in Governmental Agency. *The Indonesian Journal of Accounting Research*, 26(03), 365–392. <https://doi.org/10.33312/ijar.680>
 - [38]. Sari, N., Ervianingsih, & Zahran, I. (2023). Pengaruh Kualitas Sistem , Kualitas Informasi Dan Kualitas Layanan Terhadap Kepuasan Pengguna Sistem Informasi Manajemen RS ‘ X ’ Kota Palopo The Influence of System Quality , Information Quality and Service Quality on User Satisfaction of the Management. *Jurnal Surya Medika (JSM)*, 9(2), 219–224.
 - [39]. Sologia, F. E., Witjaksono, R. W., & Ramadani, L. (2024). Evaluation of the Successful Implementation of Enterprise Resource Planning Based on SAP Using the DeLone & McLean Model. *International Journal of Community Service Learning*, 8(1), 29–40. <https://doi.org/10.23887/ijcsl.v8i1.75924>
 - [40]. Son, H., Hwang, N., Kim, C., & Cho, Y. (2016). Construction professionals’ perceived benefits of PMIS: The effects of PMIS quality and computer self-efficacy. *KSCE Journal of Civil Engineering*, 20(2), 564–570. <https://doi.org/10.1007/s12205-015-0138-1>
 - [41]. Suardika, I. M. D., Candiasa, I. M., & Divayana, D. G. H. (2024). Analisis Kesuksesan Sistem E-Kinerja Pada Satuan Kerja Menggunakan Enhanced Information System Success Model. *Media Online*, 4(4), 1983–1993. <https://doi.org/10.30865/klik.v4i4.1634>
 - [42]. Supriyanto, A. S., & Maharani, V. (2012). Metodologi Penelitian Manajemen Sumberdaya Manusia: Teori, Kuesioner, Dan Analisis Data. Malang: UIN-Maliki Press.
 - [43]. Thongsri, N., Shen, L., & Bao, Y. (2019). Investigating Factors Affecting Learner’s Perception Toward Online Learning: Evidence From ClassStart Application in Thailand. *Behaviour and Information Technology*, 38(12), 1243–1258. <https://doi.org/10.1080/0144929x.2019.1581259>
 - [44]. Wahyu, A. R. M., Anwar, W. A., Alamsyah, Syarifuddin, Muslimin, S., & Nuringsih. (2023). Zakat Empowerment Model in Islamic Boarding School. *BALANCA : Jurnal Ekonomi Dan Bisnis Islam*, 5(2), 74–85. <https://doi.org/10.35905/balanca.v5i2.5112>
 - [45]. Wibowo, A., & Widya Sari, M. (2018). Measuring Enterprise Resource Planning (ERP) Systems Effectiveness in Indonesia. *TELKOMNIKA: Telecommunication Computing Electronics and Control*, 16(1), 343. <https://doi.org/10.12928/telkomnika.v16i2.5895>
 - [46]. Zhenyu, M. (2023). Factors Influencing Information Sharing among Users of Online Communities: A Meta-Analysis. *Lecture Notes in Education Psychology and Public Media*, 4(1), 215–224. <https://doi.org/10.54254/2753-7048/4/20220252>