CENTIVE
Conference on Electrical Engineering, Informatics,
Industrial Technology, and Creative Media
ISBN: 978-602-53004-0-0

Determining Factors in the Success of the SatuSehat Application to Support the Free Health Program Using the DeLone & McLean Method

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Abstract — SatuSehat Mobile is a digital health platform introduced by Indonesia's Ministry of Health as a key initiative in the country's ongoing healthcare technology modernization. This application provides various features to help users manage and monitor their personal health, one of which is the Free Health Check feature that functions for early detection of non-communicable diseases such as high cholesterol, diabetes, hypertension, lung function disorders, and early cancer screening. This study aims to evaluate the impact of the Free Health Check feature on users and measure the effectiveness of the SatuSehat Mobile application in achieving its objectives using the DeLone & McLean method. This method includes six measurement variables, namely: system quality of SatuSehat Mobile, information quality of SatuSehat Mobile, service quality of SatuSehat Mobile, use of SatuSehat Mobile, user satisfaction of SatuSehat Mobile, and net benefits of SatuSehatMobile. Data analysis was performed using the Smart PLS-SEM technique to test the hypothesis. The results of the PLS-SEM analysis show that of 9 relationships between constructs that were tested, there were 5 significant relationships, namely Information Quality and Service Quality to Use, System Quality to User Satisfaction, Use to Net Benefits, User Satisfaction to Net Benefits. There were 4 insignificant relationships, namely Information Quality, Service Quality and Use to User Satisfaction, System Quality to Use.

Keywords – SatuSehat Mobile, Free Health Check Feature, D&M, Information System, PLS-SEM

I. INTRODUCTION

Along with the increasingly widespread application of digital technology, digitalization of the health system in Indonesia in recent years has shown rapid development, especially aftermath of the COVID-19 pandemic. This is marked by the transition of the PeduliLindungi application, which was initially developed for contact tracing and COVID-19 control, to SatuSehat Mobile as a more comprehensive national health service platform. Quality healthcare services encompass speed, accuracy, and convenience for patients and healthcare workers. The use of information technology through electronic recording systems, telemedicine, and artificial intelligence in disease diagnosis can improve the efficiency of patient data management, reduce medical errors, and improve coordination among healthcare workers in healthcare facilities [1]. Quality healthcare services include speed, accuracy, and convenience for patients and healthcare workers. Using information technology through electronic recording systems, telemedicine, and artificial intelligence in disease diagnosis can improve the efficiency of patient data management, reduce medical errors, and improve coordination between healthcare workers in healthcare facilities [2]. Minister of Health Budi Gunadi Sadikin expressed his commitment to digitizing all health services by integrating them into a single system called SatuSehat Mobile, as well as ensuring that this system is truly responsive to patient needs.

One of the latest innovations in the SatuSehat Mobile application is the Free Health Check (CKG) feature, which has been expanded since February 2025. This feature is part of the government's strategy for to conduct early detection of health problems such as blood pressure, blood sugar, cholesterol, and examinations for early detection of diseases such as tuberculosis, cancer, and organ dysfunction. This initiative is aimed at various age groups, including infants and toddlers (under 5 years old), young children (6–9 years), teenagers (10–17 years), adults (18–59 years), and senior citizens (over 59 years). Through this

program, the government seeks to promote greater public awareness in maintaining personal health and identifying potential health issues at an early stage, before they progress into more severe conditions that may lead to costly treatments. This program has been designed to be implemented in stages, with the initial phase of the free health check program focusing on services at Community Health Centers (Puskesmas) with a target of covering around 60 million people by 2025. The Ministry of Health targets that this free health check service will reach up to 140 million Indonesians, comprising 2.9 million newborns, 13.4 million toddlers and preschoolers, 24.2 million school-age children and adolescents, 85.2 million adults, and 16.9 million elderly people. To ensure the program is implemented in accordance with its objectives, the government has allocated a budget of IDR 3.4 trillion from the 2025 State Budget, with IDR 2.2 trillion channeled through the Ministry of Health and the remaining IDR 1.2 trillion transferred to each region

Although this CKG feature is very useful, there are still concerns about the extent to which the system can be implemented properly and whether this feature is able to meet user expectations to the fullest. To provide a more objective evaluation of the CKG feature within the SatuSehat application, this research adopts the DeLone and McLean (D&M) Model a widely recognized and adaptable framework for assessing information systems. The model encompasses six core dimensions: system quality of SatuSehat Mobile, information quality of SatuSehat Mobile, service quality of SatuSehat Mobile, use of SatuSehat Mobile, user satisfaction of SatuSehat Mobile, and the resulting net benefits of SatuSehat Mobile. A successful information system must be able to optimize all these dimensions to provide net benefits for users and organizations [3]. The three key factors system quality, information quality, and service quality interact closely to shape user satisfaction in health information systems. It is emphasized that the precision, promptness, and dependability of the information provided play a crucial role in fostering positive user attitudes, particularly within services based on the JKN program [4]. The implementation of Electronic Health Records (EHR) in Saudi Arabia demonstrates that the DeLone & McLean model effectively explains how information systems influence knowledge-sharing practices among healthcare professionals [5]. This confirms that utilizing the DeLone & McLean Model to assess health information systems particularly the CKG feature in SatuSehat Mobile is both suitable and pertinent.

However, despite the potential benefits, there is limited research on how the CKG feature within the SatuSehat application influences user satisfaction and its overall effectiveness in the Indonesian healthcare context. Therefore, the research question addressed in this study is: "How does the implementation of the CKG feature in the SatuSehat Mobile application impact user satisfaction and its net benefits in the context of Indonesia's healthcare system?" The purpose of this research is to bridge this gap by evaluating the quality of system, information, and service dimensions, and analyzing their relationships to use, user satisfaction and net benefits. Understanding these relationships will help inform future improvements to the system and ensure its alignment with user expectations and organizational goals.

Furthermore, the data analysis employs Partial Least Squares – Structural Equation Modeling (PLS-SEM), a statistical approach designed to examine relationships among model variables with complex structures, especially those involving latent constructs [6].

II. RESEARCH METHOD

A. Research Stages

This study employs a quantitative approach, categorized under evaluative research. The study selects research because it aims to measure the success of the Free Health Check feature in SatuSehat Mobile in achieving user objectives. The evaluation process measures user perceptions about application quality through the DeLone & McLean model framework, which serves as a popular system information success measurement tool. The research stages carried out consisted of:

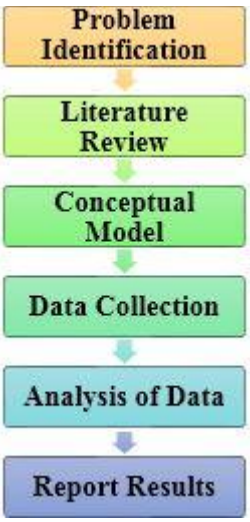

Fig.1. Research Stage

The research process can be broadly outlined as follow:

a) Problem Identification

Discussing the extent to which the quality of the Free Health Check feature in the SatuSehat application affects the degree of user satisfaction and the perceived benefits of this feature are assessed through the application of the DeLone & McLean model combined with Partial Least Squares Structural Equation Modeling (PLS-SEM).

b) Literature Review

Conducting a study or literature review related to the application of the D&M method in information system evaluation, especially in the health sector, such as previous studies related to the SatuSehat Mobile. The DeLone and McLean Information Systems (IS) Success Model is a comprehensive framework that has been widely

adopted to evaluate the effectiveness and impact of information systems across various domains. Originally proposed in 1992 and later updated in 2003, the model provides a structured approach for assessing the success of information systems by identifying six interrelated dimensions: system quality, information quality, service quality, use, user satisfaction, and net benefits. In the context of health information systems, the DeLone and McLean model is particularly relevant due to the complex and user-centric nature of healthcare environments. Prior studies have successfully applied this model to evaluate systems such as Electronic Health Records (EHRs), telemedicine platforms, and other digital health application.

c) Conceptual Model

Determining the conceptual design based on the D&M framework by identifying the influence of each D&M variable on the Free Health Check feature.

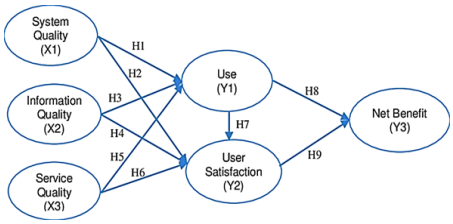

Fig.2. DeLone & McLean Conceptual Design

The following is a description of each factor along with the hypothesis (H) that explains the relationship between these factors:

1) System Quality (X1)

This includes aspects of ease of operation, feature search, technical process smoothness, and interface display.

- H1: System Quality of SatuSehat Mobile has a positive effect on Use of SatuSehat Mobile (Y1).
- H2: System Quality of SatuSehat Mobile has a positive effect on User Satisfaction of SatuSehat Mobile (Y2).

2) Information Quality (X2)

Covers the accuracy, relevance, completeness of information data, and information results that are easy to understand.

- H3: Information Quality of SatuSehat Mobile has a positive effect on Use of SatuSehat Mobile (Y1).
- H4: Information Quality of SatuSehat Mobile has a positive effect on Use Satisfaction of SatuSehat Mobile (Y2).

3) Service Quality (X3)

It encompasses elements of support services offered, including the promptness of responses and the convenience of customer or user assistance.

- H5 : Service Quality of SatuSehat Mobile has a positive effect on Use of SatuSehat Mobile (Y1)
- H6: Service Quality of SatuSehat Mobile has a positive effect on User Satisfaction of SatuSehat Mobile (Y2).

4) Use (Y1)

Refers to the level of application usage, such as how often and how users use CKG features.

- H7: Use of SatuSehat Mobile has a positive effect on User Satisfaction of SatuSehat Mobile (Y2).
- H8: Use of SatuSehat Mobile has a positive effect on Net Benefit of SatuSehat Mobile (Y3).

5) User Satisfaction (Y2)

Indicates how satisfied users feel following their experience with the application.

- H9: User Satisfaction of SatuSehat Mobile has a positive effect on Net Benefit of SatuSehat Mobile (Y3)

6) Net Benefit (Y3)

Benefits obtained by users such as understanding of health conditions, increased awareness of personal health, and benefits felt by users after using the CKG feature on SatuSehat Mobile.

7) Data Collection

The respondents of this study were users of the Free Health Check feature on SatuSehat Mobile through a survey using a research questionnaire containing an assessment of the quality of the application based on predetermined indicators using a Likert scale (1 to 5).

- Population

This study focuses on the population of Banyumas Regency residents who are users of the Free Health Check service on the SatuSehat application who can access the questionnaire. Because this application is used by various segments of society, this population can include different ages, educational backgrounds, genders, and health statuses.

- Sample

The sample size is determined using Total sampling is a method in which every individual from the population who meets the defined inclusion criteria is selected as part of the research sample. By using total sampling, the data obtained is more comprehensive and accurate because there is no risk of bias due to sample selection.

d) Analysis of Data

The data were analyzed using the Structural Equation Modeling–Partial Least Squares (SEM-PLS) approach, which is intended to examine the causal relationships among latent variables within the success model of the Free Health Check feature in the SatuSehat application, as guided by the DeLone and McLean framework. The analysis process was carried out utilizing the SmartPLS 4 software.

e) Report Results

After conducting the analysis, the final step is to compile an evaluation report that summarizes important findings, provides recommendations, and

draws conclusions regarding the success of the free health check feature using the D&M model.

B. Research Instrument

This study utilized a questionnaire as the primary research instrument, consisting of several items aligned with the variables in the DeLone and McLean model. Responses were measured using a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The questionnaire was distributed online to residents of Banyumas Regency, specifically targeting individuals who use the Free Health Check feature in the SatuSehat Mobile application.. The questionnaire to be assessed consists of 19 item questions, divided into 4 items measuring the System Quality factor, 4 items for Information Quality, 2 items addressing Service Quality, 3 items related to Usage, 3 items assessing User Satisfaction, and 3 items evaluating the Net Benefit factor. The collected data will then be analyzed using the PLS-SEM model with the SmartPLS 4 application.

Table 1. Research Questionnaire

Variabel Latent (Factors)	Observed Variables (Indicator)	Rating Scale				
		1	2	3	4	5
System Quality of SatuSehat Mobile	SQ1 : The SatuSehat application is easy to use					
	SQ2 : The health check feature is easy to find in the app					
	SQ3 : The health check process runs smoothly without technical disruptions					
	SQ4 : Attractive and easy-to-understand application display					
Information Quality of SatuSehat Mobile	IQ1 : Health check results are clear and easy to understand					
	IQ2 : The information provided feels accurate and reliable					
	IQ3 : Health check reports provide useful values					
	IQ4 : Information is always relevant and updated according to my needs					
Service Quality of SatuSehat Mobile	SVQ1 : Help or user services are easily accessible when I encounter problems					
	SVQ2 : Responsive and helpful application officer or support					
Use of SatuSehat Mobile	U1 : I am likely to use this feature again moving forward					
	U2 : This feature helps me monitor my health condition.					
	U3 : I would recommend this feature to others					
User Satisfactions of SatuSehat Mobile	US1 : I am satisfied with my experience using this free health check feature					
	US2 : This feature meets my expectations					
	US3 : I would recommend this feature to others					
Net Benefits of SatuSehat Mobile	NB1 : This feature helps me understand my health condition better					
	NB2 : This feature encourages me to be more concerned about my health					
	NB3 : This feature provides significant personal benefits for me					

III. RESULT

A. Respondent Demographics

Respondent data is a collection of information obtained from individuals or parties who are the sources of data in the study. The data encompasses several variables, including demographic characteristics such as gender, age, level of education, and the frequency with which the SatuSehat application is used, especially the Free

Health Check feature in a month. A total of 100 respondent data has been successfully collected with the information presented as follows:

1. All 100 questionnaires were completed in full without blank answers.
2. No questionnaires contained the same user name, indicating that each response was provided by a different person.
3. No questionnaires failed to meet the requirements.

The questionnaires were distributed to users of the CKG feature of the SatuSehat application in Banyumas Regency, where they had accessed this free health check service through the application, such as , for registration and checking the results of the health checks that had been carried out.

B. Test of Validity

Validity testing serves to confirm that the questionnaire or research instrument accurately measures the intended constructs. Based on the analysis of the collected data, the following outer model was generated:

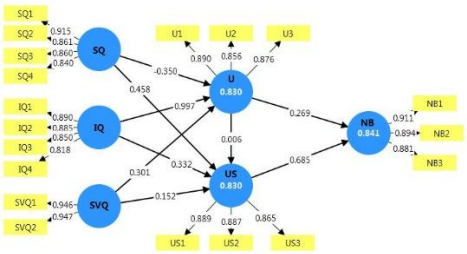

Fig.3. Outer Model PLS-SEM

From the diagram above, the outer loading results for each statement indicator are > 0.70, indicating that the indicators have a significant contribution to the construct.

Tabel 2. Average Variance Extracted (AVE) value

	AVE	Decision
IQ	0.742	Valid
NB	0.802	Valid
SQ	0.756	Valid
SVQ	0.897	Valid
U	0.764	Valid
US	0.775	Valid

Furthermore, an Average Variance Extracted (AVE) value ≥ 0.50 suggests that the construct successfully captures at least 50% of the variance from its indicators, thereby validating them. Meanwhile, indicators with low loadings (< 0.40) or that do not meet the AVE criteria indicate that the indicators are invalid and should be deleted or revised.

C. Test of Reliability

Reliability testing was conducted to determine the extent to which the indicators in each construct in the DeLone and McLean model consistently measure the intended construct. Construct reliability was assessed by examining Cronbach's Alpha as well as Composite Reliability values, including rho_A and rho_C

Table 3. Cronbach's Alpha dan Composite Reliability

	Cronbach's Alpha	Composite Reliability (rho_A)	Composite Reliability (rho_C)
IQ	0.884	0.886	0.920
NB	0.877	0.882	0.924
SQ	0.892	0.896	0.925
SVQ	0.885	0.885	0.945
U	0.845	0.848	0.906
US	0.856	0.870	0.912

The results from SmartPLS data processing revealed that every construct had a Cronbach's Alpha above 0.70, signifying good internal reliability. Additionally, Composite Reliability scores were higher than 0.70, confirming satisfactory internal consistency for the indicators of each construct. This shows that each construct in the model has good internal reliability and is consistent in measuring its indicators so that the instruments utilized in this research can be regarded as reliable.

D. Hypothesis Evaluation

Hypothesis evaluation was performed to investigate the causal relationships among the constructs within the model. The criteria for accepting or rejecting hypotheses were a t-statistic ≥ 1,96 (for a significance level of 5%) and p-value ≤ 0,05.

Table 4. Hypothesis Testing Results

Ho	Mean (M)	Standard Deviation (STDEV)	T-Statistik	P-Value	Result
H1	-0.349	0.215	1.625	0.104	Rejected
H2	0.449	0.159	2.878	0.004	Accepte
H3	0.995	0.207	4.828	0.000	Accepte
H4	0.340	0.174	1.903	0.057	Rejected
H5	0.303	0.078	3.856	0.000	Accapte
H6	0.150	0.083	1.824	0.068	Rejected
H7	0.009	0.110	0.052	0.959	Rejected
H8	0.266	0.100	2.697	0.007	Accepte
H9	0.688	0.096	7.135	0.000	Accepte

As shown in Table 4, the tests conducted indicate that:

a) H1 (SQ → U), System Quality does not significantly influence on Use.
b) H2 (SQ → US), System Quality has a significantly influence on User Satisfaction.
c) H3 (IQ → U), Information Quality has a significantly influence on Use.

d) H4 (IQ → US), Information Quality does not significantly influence on User Satisfaction.
e) H5 (SVQ → U), Service Quality has a significantly influence on Use.
f) H6 (SVQ → US), Service Quality does not significantly influence on User Satisfaction.
g) H7 (U → US), Use does not significantly influence on User Satisfaction.
h) H8 (U → NB), Use has a significantly influence on Net Benefits.
i) H9 (US → NB), User Satisfaction has a significantly influence Net Benefits.

IV. DISCUSSION

This study explores the effectiveness of the SatuSehat application's information system, particularly its free health check feature, by applying the DeLone and McLean success model framework. The analysis is carried out using the Partial Least Squares Structural Equation Modeling (PLS-SEM) method with the aid of SmartPLS 4 software. The findings reveal that each construct within the model meets acceptable standards of validity and reliability, allowing all questionnaire items to be considered suitable for analysis. Results from the reliability assessments show that all constructs achieve Cronbach's Alpha and Composite Reliability values above 0.70, with Average Variance Extracted (AVE) values exceeding 0.50. These outcomes confirm that the instrument used in this research is both valid and reliable for evaluating the specified constructs.

Out of the nine proposed hypotheses, five were found to have statistically significant relationships. The quality of information was shown to positively influence system usage, suggesting that high-quality information motivates users to engage with the system more frequently. Furthermore, system quality was found to significantly impact user satisfaction, supporting the idea that a system that is dependable, responsive, and user-friendly contributes to increased satisfaction among users. These findings are in line with previous studies such as those conducted by [7]. In addition, Service Quality also affects Use, which means that service support from system providers influences users' decisions to continue using the system. Both use and user satisfaction were also identified as significant predictors of net benefits, indicating that increased engagement with the system and positive user experiences contribute directly to the perceived value and overall impact of the system [8]. But with different strengths of influence. User satisfaction emerged as the most influential factor affecting net benefits, suggesting that users' positive experiences with the system play a critical role in maximizing the overall value and advantages derived from its use.

Nevertheless, the study identified several relationships that were not statistically significant, including the effect of system use on user satisfaction, as well as the effects of service quality and information quality on user satisfaction. These findings suggest that, within the scope of this research, user satisfaction is not necessarily driven by how often the system is used or by the perceived quality of the services and information it provides. Instead, satisfaction appears to be more strongly shaped by the system's technical performance and overall quality.

In study [9], which analyzed the success of information systems through the DeLone and McLean framework, the research used the four factors of DeLone and McLean, where all hypotheses significantly influenced each other. In addition to the health sector, D&M can also be applied in the financial sector [10]. Although only four factors were used for analysis, the use of SEM-PLS made it easier to process the data for this study. In SEM-PLS calculations, before testing the hypotheses, each indicator question or statement to be processed must first be tested for validity and reliability [9]. An effective research instrument is characterized by indicators that are strongly correlated, typically demonstrated by outer loading values exceeding 0.70, an Average Variance Extracted (AVE) greater than 0.50 to confirm validity, and a Cronbach's Alpha above 0.70 to ensure reliability. While numerous previous studies employing the DeLone and McLean (D&M) model have shown that all variables significantly influence one another, this study presents a contrasting finding. Four of the proposed hypotheses were not supported, suggesting that some relationships among the variables may not be as strong or consistent in this particular context [10]. The DeLone and McLean Information Systems Success Model (D&M model) is a widely recognized framework for assessing the effectiveness of information systems. It offers a structured set of metrics to classify system success and outlines both temporal and causal relationships among its key components. This study has important implications for practitioners and information system managers so that they can improve system usage and information quality, as well as support services. Information technology has become a critical component in the delivery of healthcare services today. In this study, the researcher integrates selected indicators from previous studies that are better suited for evaluating electronic medical records (EMRs) [11].

Although this study contains new findings, as no previous research has examined the free health check feature on the Satusehat application, it is still limitated to this study. First, the sample used was only for the Banyumas district. Second, there were four hypotheses that did not have a significant effect even though all data indicators met the validity and reliability test requirements. Future research should expand the sample coverage by involving various industry sectors or organizations. In addition, testing the mediating effect (user satisfaction) or moderating effect (e.g., user experience, age, or education level) can provide a deeper understanding of the dynamics of the relationship between constructs. A mixed approach can also be used to explore qualitative

insights related to user perceptions of information systems.

V. CONCLUSSION

Based on the data analysis results performed using the Partial Least Squares Structural Equation Modeling (PLS-SEM) technique via the SmartPLS software, the following key conclusions were drawn:

A. Research Instruments Proven Reliable and Valid

The constructs of Information Quality of SatuSehat Mobile, System Quality of SatuSehat Mobile, Service Quality of SatuSehat Mobile, Use of SatuSehat Mobile, User Satisfaction of SatuSehat Mobile, and Net Benefits of SatuSehat Mobile all demonstrated Cronbach's Alpha and Composite Reliability scores above 0.70, alongside AVE values surpassing 0.50. This signifies that the measurement instruments fulfill the standards of reliability and convergent validity, validating their use in model evaluation.

B. Hypothesis Test Results

Of the 9 relationships between constructs that were tested, there were 5 significant relationships at a significance level of 5%, namely:

- Information Quality of SatuSehat Mobile → Use of SatuSehat Mobile.
- System Quality of SatuSehat Mobile → User Satisfaction of SatuSehat Mobile.
- Service Quality of SatuSehat Mobile → Use of SatuSehat Mobile.
- Use of SatuSehat Mobile → Net Benefits of SatuSehat Mobile.
- User Satisfaction of SatuSehat Mobile → Net Benefits of SatuSehat Mobile.

Meanwhile, 4 relationships were not significant,

namely:

- Information Quality of SatuSehat Mobile → User Satisfaction of SatuSehat Mobile.
- System Quality of SatuSehat Mobile → Use of SatuSehat Mobile
- Service Quality of SatuSehat Mobile → User Satisfaction of SatuSehat Mobile
- Use of SatuSehat Mobile → User Satisfaction of SatuSehat Mobile

C. Implications of Findings

The results suggest that Information Quality and Service Quality significantly encourage system usage, whereas System Quality exerts a stronger impact on user satisfaction. Furthermore, both Use and User Satisfaction positively affect the net benefits gained, with User Satisfaction demonstrating the most substantial influence

D. The Overall Model Supports Most of DeLone and McLean's Concepts

Although not all relationships in the model proved significant, these results generally support DeLone and McLean's theoretical framework on information system success of SatuSehat Mobile, Especially focusing on the impact of quality dimensions and user reactions on the net benefit

ACKNOWLEDGMENT

This study was financially supported by STMIK Widya Utama Purwokerto and the Conference on Electrical Engineering, Informatics, Industrial Technology, and Creative Media. The authors express their sincere gratitude to all individuals and organizations who have contributed to and participated in this research.

REFERENCES

[1] Lubis and Pratama. (2025, March). Peran Teknologi Informasi dalam Peningkatan Kualitas Kesehatan. *Jurnal Pendidikan Tambusai.. volume (9),* 8052-8060.

[2] Muhawarman Aji, "Langkah Awal Program Pemeriksaan Kesehatan Gratis Unduh SatuSehat Mobile,". Kementerian Kesehatan, Jakarta, Indonesia, 2025.

[3] DeLone, W., & McLean, E. (2003). The DeLone and McLean Model of Information Systems Success: A Ten-Year Update. Journal of Management Information Systems, 19(4), 9–30.

[4] Julianti, A., and Markam, H. (2023) Kepuasan Pengguna Mobile JKN menggunakan Delone dan Mclean Framework. Health Information : Jurnal Penelitian. 15(2).

[5] Alshehri, A., and Hadoussa, S. (2025). Reevaluating the DeLone and McLean Model for HER Success and Knowledge-Sharing in a Saudi Public Medical Complex. Jurnal of Information Technology Management. 17(2), 28-49.

[6] Hair et al.. (2022). Partial Least Squares Structural Equation Modeling (PLS-SEM) in second language and education research: Guidelines using an applied example. Research Methods in Applied Linguistics. 1(3),

[7] Alzahrani et al. (2017). Modelling Digital Library Success Using the DeLone and McLean Information System Success Model. Jpournal of Librarianship and Information Science. 1-16.

[8] Purwanto Adnan et al. (2021). Determinant Factors Affecting the Information System Success of Community-Based Application to Fight Covid-19 Pandemic. International Conference on Computer, Control, Informatics and Its Applications .(5-6). 1-5.

[9] Ruth Johana Angelina, Aji Hermawan, and Arif Imam Suroso. (2019). Analyzing E-Commerce Success using DeLone and McLean Model. Journal of Information Systems Engineering and Business Intelligence 5(2), 156.

[10] Samar Rahi and Mazuri Abd.Ghani. (2019). Integration of DeLone and McLean and self-determination theory in internet banking continuance intention context. International Journal of Accounting & Information Management.27(3). 512–528.
[11] F. Zheng, Wang Kang, Q. Wang, etc,. (2023). Factors Influencing Clinicians' Use of Hospital Information Systems for Infection Prevention and Control: Cross-Sectional Study Based on the Extended DeLone and McLeean Model. Journal of Medical Internet Research. 25(1).