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DRIVING DIGITAL VALUE IN HEALTHCARE: THE MEDIATING ROLE OF INTENTION TO USE IN THE RELATIONSHIP BETWEEN SYSTEM FACTORS AND NET BENEFIT AMONG USERS OF THE HOSPITAL INFORMATION SYSTEM (HIS) IN THE MEDICAL CHECK-UP UNIT XY PRIVATE HOSPITAL INDONESIA 2025

Indri Rengganis Budi Utomo[1]
Esa Unggul University, Jakarta, Indonesia
indri.rbu@student.esaunggul.ac.id

Munawar[2]
Esa Unggul University, Jakarta, Indonesia
munawar@esaunggul.ac.id

Ratna Indrawati[3]
Esa Unggul University, Jakarta, Indonesia
ratna.indrawati@esaunggul.ac.id

Abstract

This study was grounded on observations indicating that the utilization rate of the Hospital Information Management System (HIS) WPRO at the Medical Check-Up (MCU) Unit of XY Hospital remains relatively low. The purpose of this research is to analyze the influence of Information Quality, System Quality, Facilitating Conditions, Subjective Norm, and Intention to Use on the Net Benefit of HIS usage at the MCU Unit of XY Hospital, employing a modified DeLone & McLean Information System Success Model. This study used a quantitative approach with a causal design. The study population consisted of all hospital staff involved in the Medical Check-Up (MCU) services, totaling 84 respondents. Sampling was carried out using a probability sampling method with a saturated sample, as all eligible MCU personnel were included in the study. Data were collected through questionnaires and analyzed using Structural Equation Modeling–Partial Least Squares (SEM–PLS). The results demonstrate that Information Quality, System Quality, Facilitating Conditions, Subjective Norm, and Intention to Use simultaneously exert a significant influence on the Net Benefit of HIS utilization ($p < 0.05$). Theoretically, these findings support the propositions of prior research and confirm the relevance of established IS success models. From a managerial perspective, the results provide practical recommendations for XY Hospital to enhance HIS implementation by improving data integration, strengthening information security protocols, and increasing organizational support. These initiatives are expected to foster stronger user intention and, ultimately, lead to greater tangible benefits from HIS implementation in healthcare operations.

Keywords: Hospital Information System, Information Quality, System Quality, Facilitating Condition, Subjectiv Norm, Intention to Use, Net Benefit

INTRODUCTION

Hospitals are complex healthcare organizations that must manage a wide range of components in an integrated manner, including medical services, human resource management, administrative operations, and financial systems. Within the framework of Indonesia's digital health transformation, the government has strengthened hospital information policies through several key regulations such as Minister of Health Regulation No. 82 of 2013 on Hospital Information Systems (HIS), Ministerial Decree No. HK.01.07/MENKES/6/2024, which designates HIS as a mandatory component of minimum service standards, and Minister of Health Regulation No. 24 of 2022 concerning Electronic Medical Records (RME) integrated into the national *SatuSehat* platform. Collectively, these regulations establish a strategic foundation for hospitals to enhance efficiency, accelerate service delivery, and reinforce data-driven decision-making.

The implementation of HIS holds significant potential to improve service quality, streamline workflows, and reduce human error. According to Ayustya and Sitorus (2025), the adoption of digital hospital systems can increase documentation efficiency by up to 30% and expedite insurance claim processing by 40%. Furthermore, such systems facilitate cross-departmental integration covering registration, medical records, finance, and logistics thus strengthening coordination and accountability in healthcare delivery (Nugroho, 2008; Wahyuningsih, 2024). Despite these benefits, numerous studies indicate that HIS implementation in Indonesian hospitals remains suboptimal, particularly in specialized units such as Medical Check-Up (MCU), which require cross-departmental data integration and rapid, real-time service delivery (Purnamasari & Musdholifah, 2016; Saputra et al., 2024; Sari et al., 2023).

Preliminary observations and internal reports from XY Hospital (2023–2025) reveal that the utilization rate of the WPRO HIS version 3.04 within the MCU unit remains low. More than 60% of users reported that the information provided by the system did not adequately support their operational needs, and 61% expressed dissatisfaction with system quality. Secondary data further indicate that MCU patient reports are typically issued only two to three days after examinations, due to the absence of automated reporting templates. Manual processes such as transferring data from HIS to Excel and subsequently to Word lead to delays and input errors. This inefficiency has contributed to a 17% decline in MCU patient volume between 2022 and 2024, along with reduced confidence among physicians and clinical staff regarding system effectiveness.

Operational risk assessments further highlight that 50% of twelve identified MCU risks during 2023–2024 were directly related to HIS issues, including billing miscalculations, duplicate patient data, and system downtime. In addition, 80% of service incidents in 2024 were linked to system weaknesses such as patient misidentification and labeling errors. These findings suggest that the net benefits of HIS WPRO implementation have yet to be fully realized. Field observations identified several barriers: limited desktop-based access, low data security (40% of staff shared login credentials), and inadequate system training or accessible user manuals (reported by 81% of respondents).

From a theoretical standpoint, the success of information system implementation can be explained using the DeLone and McLean IS Success Model (2003), which evaluates system effectiveness based on six key dimensions: *Information Quality*, *System Quality*, *Service Quality*, *Intention to Use*, *User Satisfaction*, and *Net Benefit*. The model emphasizes that system and information quality form the foundation for developing user intention and satisfaction, which ultimately lead to organizational benefits. However, prior research also suggests that non-technical factors such as Facilitating Conditions and Subjective Norms play a vital role in influencing user intentions and behaviors,

particularly in hospitals characterized by complex organizational and social structures (Ajzen, 1991; Venkatesh & Davis, 2000; Saengchai et al., 2019).

Facilitating Conditions reflect the extent to which an organization provides adequate infrastructure, training, and technical support. Without strong institutional support, even sophisticated systems cannot function optimally (Wahyuni et al., 2023; Salsabila & Sari, 2022). At XY Hospital, HIS training for MCU staff remains limited and does not fully address practical service needs. Meanwhile, Subjective Norms, representing social influences from supervisors and peers, also exhibit disparities 70% of non-medical supervisors encouraged HIS use, whereas support from medical departments was only 12%. Most clinical staff reported that the system does not meet their day-to-day clinical requirements, thereby reducing motivation to use it.

Interestingly, despite these limitations, 88% of users expressed a positive intention to continue using HIS in the future. This finding highlights a latent potential for adaptation and commitment among users one that can be strengthened through improvements in system functionality, information quality, and organizational support. Within the modified DeLone and McLean framework, *Intention to Use* serves as a mediating variable linking system-related factors to tangible *Net Benefits*. This aligns with findings by Setyawan et al. (2020) and Martono et al. (2020), who demonstrated that user intention directly influences the success of technological implementation.

Based on these premises, this study aims to analyze the effects of Information Quality, System Quality, Facilitating Conditions, and Subjective Norms on the Net Benefit of HIS usage, with Intention to Use serving as a mediating variable in the MCU Unit of XY Hospital in 2025. The novelty of this research lies in its expansion of the DeLone and McLean model by incorporating organizational and social dimensions an approach that remains underexplored in the context of private metropolitan hospitals. Theoretically, this study contributes to the growing body of literature on hospital information system success in Indonesia. Practically, its findings are expected to provide actionable insights for Mayapada Hospital management to optimize HIS utilization in an integrated manner, thereby improving workflow efficiency, service quality, and user satisfaction.

RESEARCH METHOD

This study employed a quantitative research method with a cross-sectional design. The study population consisted of all hospital staff providing Medical Check-Up (MCU) services at XY Hospital, totaling 84 respondents. The sample comprised all MCU service staff who consented to participate in the study. A saturated sampling technique (also known as a census approach) was applied, in which the entire population was used as the research sample (Sugiyono, 2018). Consequently, the total sample size in this study was 84 respondents.

Data were collected using a six-point Likert scale questionnaire, and the analytical method employed was Structural Equation Modeling (SEM). SEM was chosen as it is suitable for examining multivariate relationships involving two or more interrelated constructs.

The measurement instruments were developed based on established theoretical frameworks as follows: Information Quality (IQ) was measured using six items representing three dimensions from the DeLone and McLean IS Success Model (2003): *(1) Accuracy, (2) Completeness, (3) Relevancy);* System Quality (SQ) was assessed through thirteen items across five dimensions adapted from DeLone and McLean (2003): *(1) Reliability, (2) Speed, (3) Access, (4) Ease of Use, (5) Security);* Facilitating Conditions (FC) consisted of thirteen items with four dimensions based on Venkatesh et

al. (2003): *(1) Infrastructure, (2) Organizational Support, (3) Technical Support, (4) Usage Guidelines);* Subjective Norm (SN) included eleven items derived from Venkatesh & Davis (2000), capturing the social and behavioral dimensions that influence technology use; Intention to Use (IU) was measured by four items referring to DeLone & McLean (2003) with two dimensions: *(1) Nature of Use, (2) Frequency of Use);* Net Benefit (NB) comprised thirteen items encompassing four dimensions according to DeLone and McLean's IS Success Model (2003): *(1) Productivity, (2) Decision-Making Quality, (3) Organizational Control, (4) Service Quality Improvement).* All constructs were evaluated for validity and reliability prior to hypothesis testing to ensure instrument consistency and measurement accuracy.

RESULTS AND DISCUSSION

A total of 84 respondents who met the inclusion criteria participated in this study. The characteristics of the respondents were categorized based on gender, age, educational background, and length of service. The table below presents a detailed summary of the demographic characteristics of the study participants.

Table 1.
Respondent Descriptions

Category	Total (n=84)	Presentage(%)
Gender		
Man	31	36.9%
Woman	53	63.1%
Age		
21-25 years old	9	10.7%
26-30 years old	29	34.5%
31-35 years old	15	17.8%
36-40 years old	9	10.75
41-45 years old	11	13.1%
46-50 years old	8	9.5%
>50 years old	3	3.5%
Education		
D3	35	41.667
S1	39	46.429
S2	1	1.190
S3	1	1.190
Specialist doctor	8	9.524
Hospital Officers		
MEDIC	76	90.476
NON MEDIC	8	9.524
Missing	0	0.000
Departement		
Admin MCU	4	4.762
GP Doctor MCU	2	2.381
Specialist Doctor	8	9.524
Cashier MCU	4	4.762
Head dept MCU	1	1.190
Nursing MCU	3	3.571
Assistant Doctor Specialist	11	13.095
Laboratorist	24	28.571

Category	Total (n=84)	Presentage(%)
Medical Record Officer	11	13.095
Radiographer	16	19.048

As shown in the table above, the majority of respondents (63.1%) were female. The most common age group was 26–30 years (34.5%). In terms of educational background, most respondents held a Bachelor's degree (46.4%). The majority of participants were medical personnel (90.48%), while in terms of departmental distribution, the largest proportion of respondents were laboratory staff (28.57%).

Subsequently, validity and reliability testing of the research instruments was conducted through an outer model assessment, which included tests of Convergent Validity and Composite Reliability. After confirming that all instruments were valid and reliable, a descriptive index analysis was performed for each variable to illustrate the respondents' overall perceptions of the questionnaire items.

The scoring technique used in this study applied a six-point Likert scale, with a minimum score of 1 and a maximum score of 6. The response index was calculated using the formula adapted from Ferdinand (2019) as follows:

Index Value = [(F1 x 1)+ (F2 x 2)+ (F3 x 3)+ (F4 x 4) + (F5 x 5)+ (F6 x 6)] / 6

Remarks:
F1 = Frequency of respondents who answered 1
F2 = Frequency of respondents who answered 2
F3 = Frequency of respondents who answered 3
F4 = Frequency of respondents who answered 4
F5 = Frequency of respondents who answered 5
F6 = Frequency of respondents who answered 6

After conducting the Three-Box Method analysis, the Three-Box Index Matrix was obtained as follows:

Table 2.
Matrix Three-Box Method

Variable	Categories Index			Behaviour
	Low	Medium	High	
SQ *(System Quality)*			√	*Reliable*
IQ *(Information Quality)*			√	*Accurate*
F *(Facilitating Condition)*			√	*Well supported*
SN *(Subjective Norm)*			√	*Strong social influence*
ITU *(Intention to Use)*			√	*Committed usage behavior*
NB *(Net Benefit)*			√	*Significant impact*

The findings revealed that all variables in this study were categorized as high based on the Three-Box Method index.

The System Quality (SQ) variable achieved a high score, indicating that the WIPRO HIS system was perceived to possess strong system performance, ease of use, and robust security features. Similarly, the Information Quality (IQ) variable also fell into the high category, suggesting that the information provided by the system is accurate, complete, and relevant to clinical and administrative needs.

The Facilitating Conditions (FC) variable was rated high as well, demonstrating that the hospital has provided sufficient supporting infrastructure—such as hardware,

network connectivity, and user training—to enable optimal utilization of WIPRO HIS. The Subjective Norm (SN) variable also showed a high category, reflecting a strong level of social encouragement and professional expectations that motivate healthcare workers to use the system consistently.

Likewise, the Intention to Use (ITU) variable obtained a high score, indicating that healthcare staff exhibit a strong commitment and willingness to continuously use WIPRO HIS in their daily operational tasks. Finally, the Net Benefit (NB) variable was also classified as high, demonstrating that the system has provided tangible benefits in terms of work efficiency, service accuracy, and managerial decision-making support.

These findings underscore that WIPRO HIS has been well accepted by its users and has generated positive impacts on both the quality of healthcare services and the overall performance of the hospital.

Figure 1.
The Bootstrapping Model Estimation Results

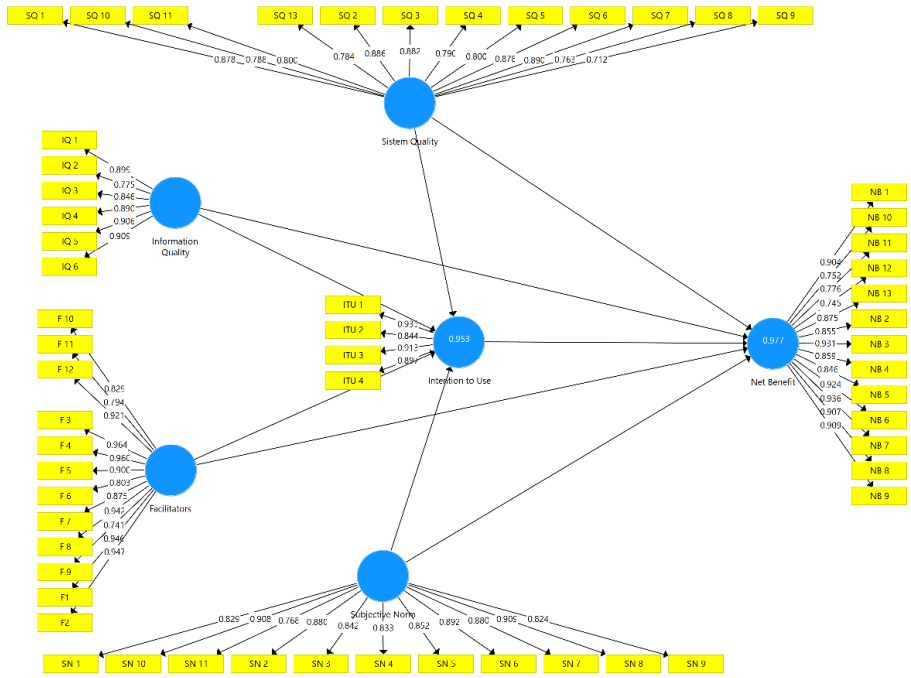

Figure 1 presents the results of items that are considered valid, indicated by T-statistics ≥ 1.96. This finding shows that Information Quality, System Quality, Facilitating Conditions, and Subjective Norm have an influence on Net Benefit.

The following presents the results of the simultaneous hypothesis testing.

Table 3.
Results of the Simultaneous Effect Hypothesis Testing

Model		Sum of Squares	df	Mean Square	F	Sig.	Remarks
1	Regression	9225,429	4	2306,357	716,662	0,000[b]	H1 Accepted
	Residual	254,237	79	3,218			
	Total	9479,667	83				

a. Dependent Variable: NB
b. Predictors: (Constant), ITU, SN, SQ, F

As shown in the table above, the analysis yielded a p-value of 0.000 and an F-statistic of 716.662. The corresponding F-table value for 84 respondents, four independent variables, and a significance level of 0.05 was 2.49. Since the calculated F-value (716.662) is greater than the critical F-value (2.49), it can be concluded that there is a simultaneous and statistically significant effect among the variables Information Quality, System Quality, Facilitating Conditions, Subjective Norm, and Intention to Use on Net Benefit. For the partial (direct) effect analysis, the decision criteria were based on the following thresholds:
The hypothesis is accepted if p-value < 0.05 and t-statistic ≥ 1.96.
The original sample value indicates the strength and direction of the relationship, where values > 0 represent a positive effect, and values < 0 indicate a negative effect.
The results of the direct effect hypothesis testing are presented in the following table.

Table 4.
Results of the Direct Effect Hypothesis Testing

Hypothesis	Coef.	T-stat	P-value	Remarks
IQ → ITU	0.093	2.242	0.025	H2 Accepted
SQ → ITU	0.411	5.430	0.000	H3 Accepted
F → ITU	0.535	6.133	0.000	H4 Accepted
SN → ITU	-0.025	0.294	0.769	H5 Decline
IQ → NB	0.048	1.805	0.072	H6 Decline
SQ → NB	0.274	3.289	0.001	H7 Accepted
F → NB	0.408	4.003	0.000	H8 Accepted
SN → NB	0.04	0.355	0.722	H9 Decline
ITU → NB	0.25	2.903	0.004	H14 Accepted

Based on the results presented in the table above, the direct relationships among the variables can be interpreted as follows:
IQ → ITU, coef. = 0.093, p = 0.025. *Information Quality* has a positive and significant effect on *Intention to Use*. This finding indicates that the higher the quality of information provided, the stronger the users' intention to utilize the system or technology.
SQ → ITU, coef. = 0.411, p = 0.000. *System Quality* has a positive and significant effect on *Intention to Use*. This implies that better system performance—reflected in reliability, ease of use, and accessibility—leads to a higher level of user intention to engage with the system.
FC → ITU, coef. = 0.535, p = 0.000. *Facilitating Conditions* exhibit a positive and significant effect on *Intention to Use*. This demonstrates that available support—such as technical facilities, organizational resources, and a conducive working environment—strongly encourages users to adopt and use the system.
SN → ITU, coef. = –0.025, p = 0.769. *Subjective Norm* does not have a significant effect on *Intention to Use*. This suggests that social influence or pressure from colleagues, supervisors, or the organizational environment does not significantly affect users' intention to use the system.
IQ → NB, coef. = 0.048, p = 0.072. *Information Quality* does not significantly affect *Net Benefit*. Although the system provides good-quality information, it does not directly translate into tangible benefits perceived by the users.

SQ → NB, coef. = 0.274, p = 0.001. *System Quality* has a positive and significant effect on *Net Benefit*. This means that higher system quality results in greater tangible benefits perceived by users.
FC → NB, coef. = 0.408, p = 0.000. *Facilitating Conditions* have a positive and significant effect on *Net Benefit*. Adequate organizational and technical support contributes directly to enhancing the perceived benefits of system utilization.
SN → NB, coef. = 0.040, p = 0.722. *Subjective Norm* does not significantly affect *Net Benefit*. This indicates that social influence does not have a direct impact on the tangible benefits perceived by users.
ITU → NB, coef. = 0.250, p = 0.004. *Intention to Use* has a positive and significant effect on *Net Benefit*. This confirms that a stronger user intention to utilize the system leads to greater tangible benefits derived from its use.

The Indirect Effect analysis was conducted to determine whether independent variables exert an influence on the dependent variable through the mediating variable (Intention to Use). The test was performed at a 5% significance level ($p < 0.05$). The criterion for mediation significance is that the indirect relationship is considered significant when p-value < 0.05.

The results indicate that certain relationships between independent variables and Net Benefit are mediated by Intention to Use, confirming the role of behavioral intention as an important intervening variable within the modified DeLone and McLean IS Success Model applied in this study.

Table 5.
Results of the Indirect Effect Hypothesis Testing

	Coefficient	Standar Deviasi (STDEV)	T Statistik (|O/STDEV|)	P Values	Remarks
IQ → ITU → NB	0.023	0.013	1.714	0.087	H10 Decline
SQ → ITU → NB	0.103	0.040	2.583	0.010	H11 Accepted
F → ITU → NB	0.134	0.050	2.672	0.008	H12 Accepted
SN → ITU → NB	-0.006	0.019	0.335	0.738	H13 Decline

Based on the data presented above, the results of the indirect effect analysis for each variable are as follows:

Facilitating Conditions on Net Benefit through Intention to Use. The path coefficient was 0.134, with a t-statistic of 2.672 (> 1.96) and a p-value of 0.008 (< 0.05). This indicates that the indirect effect of Facilitating Conditions on Net Benefit through Intention to Use is significant. Therefore, Intention to Use acts as a mediating variable in this relationship.

Effect of Information Quality on Net Benefit through Intention to Use. The path coefficient was 0.023, with a t-statistic of 1.714 (< 1.96) and a p-value of 0.087 (> 0.05). This means that the indirect effect of Information Quality on Net Benefit through Intention to Use is not significant. Thus, no mediation effect is evident in this pathway.

Effect of System Quality on Net Benefit through Intention to Use. The path coefficient was 0.103, with a t-statistic of 2.583 (> 1.96) and a p-value of 0.010 (< 0.05). This finding shows that the indirect effect of System Quality on Net Benefit through Intention to Use is significant, confirming that Intention to Use mediates the relationship between System Quality and Net Benefit.

Effect of Subjective Norm on Net Benefit through Intention to Use. The path coefficient was –0.006, with a t-statistic of 0.335 (< 1.96) and a p-value of 0.738 (> 0.05). This indicates that the indirect effect of Subjective Norm on Net Benefit through Intention to Use is not significant. In other words, there is no mediating effect present in this pathway.

Discussion

The results of this study indicate that, simultaneously, Information Quality, System Quality, Facilitating Conditions, and Subjective Norm have a significant effect on the Net Benefit of HIS WIPRO users in the Medical Check-Up (MCU) unit at XY Hospital. These findings confirm that the success of a hospital information management system is not solely dependent on technical aspects but is also shaped by organizational support and social factors that influence user behavior.

This result aligns with the DeLone and McLean Information System Success Model (2003), which emphasizes that *system quality*, *information quality*, and *service quality* are the primary determinants of *user satisfaction* and *net benefit*. In this context, *facilitating conditions* (organizational support) and *subjective norms* (social influence) strengthen effective system utilization. Similarly, Petter et al. (2008) found that system and information quality directly affect organizational benefits by improving work efficiency, decision-making speed, and reducing input errors. At XY Hospital, the increased net benefit is reflected in more efficient administrative documentation, faster billing processes, and enhanced accuracy of MCU patient data.

Effect of Information Quality on Intention to Use and Net Benefit. The analysis shows that Information Quality has a significant positive effect on Intention to Use but not on Net Benefit. This implies that higher perceived information quality increases users' intention to use HIS, although it does not directly translate into tangible benefits. According to DeLone and McLean (2003), information quality is determined by accuracy, completeness, relevance, and timeliness. In the context of HIS WIPRO, while administrative data are well provided, medical information such as CPPT, laboratory, and radiology (PACS) results remain partially integrated. Consequently, users perceive the system as useful but do not yet experience a significant net benefit in the MCU service workflow. This aligns with the correlation that information quality must represent the fundamental needs of users in carrying out their tasks and roles, as noted by Ratna Indrawati (2025)

This finding supports Suryani et al. (2021), who asserted that information quality fosters usage intention, yet organizational benefits depend on cross-unit data integration. Field observations confirm this—MCU reports still require 2–3 days for completion due to the absence of an automated reporting template, leading to manual data transcription. Hence, improving *data interoperability* is key to ensuring that information quality contributes to direct service performance benefits.

Effect of System Quality on Intention to Use and Net Benefit. System Quality has a significant positive influence on both Intention to Use and Net Benefit. This demonstrates that systems with high reliability, fast access, and ease of use encourage stronger user intention and generate greater organizational benefits. This finding is consistent with DeLone and McLean (2003) and supported by Kisekka & Giboney (2018), who emphasized that system quality directly determines the success of hospital information systems. At XY Hospital, users appreciate HIS for its speed in administrative input and billing validation, despite its outdated interface and lack of multi-user real-time editing capabilities. Empirically, 40% of staff still share usernames, and system access is limited to desktop devices, which hinders on-site MCU operations. Nonetheless, the

perceived reliability and stability of the system remain major drivers of *intention to use* and *net benefit*.

Effect of Facilitating Conditions on Intention to Use and Net Benefit. Facilitating Conditions significantly affect both Intention to Use and Net Benefit, highlighting the importance of organizational support, training, and infrastructure in optimizing system implementation. In UTAUT (Venkatesh et al., 2003), facilitating conditions refer to the degree to which individuals believe that resources and support are available for system use. At XY Hospital, user training for HIS exists but remains irregular and limited to non-medical staff. This is consistent with Saengchai et al. (2019) and Wahyuni et al. (2023), who found that technical support and institutional policies enhance hospital readiness for digital adoption. The absence of a dedicated technical helpdesk and easily accessible manuals causes users to rely on peers for troubleshooting. To strengthen facilitating conditions, hospitals should implement *digital learning modules*, *online ticketing systems*, and *leadership-based monitoring dashboards* (e.g., MyStar) to assess real-time system utilization across departments.

Effect of Subjective Norm on Intention to Use . The hypothesis that Subjective Norm affects Intention to Use is rejected. The findings reveal that social pressure and peer influence do not significantly shape users' behavioral intention to adopt HIS WIPRO. Theoretically, Ajzen's Theory of Planned Behavior (1991) and Venkatesh & Davis's TAM2 (2000) propose that subjective norms influence behavioral intention when social pressure is strong and originates from authoritative figures. However, at XY Hospital, social support for HIS usage remains weak—only 12% of medical staff reported receiving direct encouragement from supervisors, compared to 70% in non-medical units.

Without formal performance appraisals or reward systems tied to HIS utilization, social pressure does not translate into actual usage. Field evidence further supports this: many MCU staff use HIS out of necessity rather than social motivation. During on-site MCU events, they often revert to manual documentation or Excel due to HIS WIPRO's desktop-only access. These limitations hinder the emergence of a digital culture that fosters voluntary usage. This finding supports Laudon & Laudon (2014) and Martono et al. (2020), who argue that social influence only becomes effective when supported by strong organizational commitment and leadership engagement.

Effect of Information Quality on Net Benefit. The results show that Information Quality does not significantly influence Net Benefit, diverging from the expectations of DeLone & McLean's (2003) model. While accurate, relevant, and timely information typically enhances organizational performance, the meta-analysis by Petter et al. (2008) found that its effect is not always direct. Task–Technology Fit Theory (Goodhue & Thompson, 1995) explains that system benefits arise only when technology aligns with user tasks. In this study, fragmented medical data across multiple platforms (GE, Wynacom, and WIPRO) reduced workflow efficiency and caused data redundancy, thereby limiting perceived benefits. This aligns with Usman & Takdir (2024), who found that high information quality may even burden users when not supported by system integration. Thus, in the MCU context, *System Quality* and *Facilitating Conditions* have a stronger influence on net benefits than information quality alone.

Effect of Subjective Norm on Net Benefit. Subjective Norm does not significantly affect Net Benefit, indicating that social or hierarchical influence does not necessarily produce tangible performance gains. This supports the Theory of Planned Behavior (Ajzen, 1991) and UTAUT (Venkatesh et al., 2003), which posit that subjective norms primarily affect intention rather than direct outcomes. The finding also echoes studies by Hung et al. (2014), showing that external regulation and peer influence have weak effects on system-related benefits among medical professionals. At XY Hospital, users prioritize

practical efficiency such as faster data entry and service turnaround over social compliance. As a result, social influence fails to enhance system performance, reaffirming that net benefits are largely determined by technical and organizational enablers rather than normative pressures.

Intention to Use as a Mediating Variable. Finally, Intention to Use significantly affects Net Benefit and mediates the relationship between System Quality and Facilitating Conditions with Net Benefit. The stronger the users' intention to use the system, the greater the organizational benefits realized. This aligns with UTAUT (Venkatesh et al., 2003), where behavioral intention is a direct determinant of actual system use and performance outcomes. In the context of XY Hospital, users who consistently utilize HIS produce faster MCU reports and fewer administrative errors. Overall, the study reinforces the DeLone & McLean IS Success Model (2003) by demonstrating that *System Quality* and *Facilitating Conditions* are key drivers of HIS success, while *Information Quality* and *Subjective Norm* require organizational and technical reinforcement to deliver measurable benefits.

CONCLUSION

This study demonstrates that Information Quality, System Quality, Facilitating Conditions, and Subjective Norm collectively influence the Net Benefit of HIS WIPRO users in the Medical Check-Up (MCU) unit at XY Hospital, with Intention to Use serving as a mediating variable. The findings reaffirm that the success of hospital information system implementation is not solely determined by technical system quality, but also by organizational readiness and a supportive digital culture that sustains continuous user engagement, this clearly supports and aligns with the findings of Munawar et al. (2024), who emphasized that system quality, information quality, and service support are critical determinants of SIMRS implementation success, as they directly influence user satisfaction and the quality of electronic medical record outputs

On a partial level, System Quality and Facilitating Conditions show significant positive effects on both Intention to Use and Net Benefit, indicating that system reliability and organizational support are key drivers in realizing tangible hospital benefits. Conversely, Information Quality only influences Intention to Use, while Subjective Norm shows no significant effect on either dependent variable. These results highlight that information quality and social influence remain suboptimal in enhancing both usage intention and perceived system benefits.

Moreover, Intention to Use plays a crucial mediating role between System Quality and Facilitating Conditions toward Net Benefit, emphasizing that user intention serves as a bridge linking system effectiveness to organizational productivity and efficiency. However, hypotheses related to Subjective Norm and Information Quality on Net Benefit are rejected, largely due to weak data integration, limited social support from medical staff, and the absence of a fully established digital usage culture within the MCU unit.

The results confirm the DeLone and McLean Information System Success Model (2003), positioning *system quality* and *facilitating conditions* as the main pillars of information system success, while also providing contextual contributions to theory development within private hospital settings in Indonesia.

The theoretical implication of this study lies in its reinforcement of the DeLone and McLean Information System Success Model (2003), Technology Acceptance Model 2 (TAM 2), Theory of Planned Behavior (TPB), and Unified Theory of Acceptance and Use of Technology (UTAUT) within the context of hospital information systems implementation. The findings demonstrate that system quality and facilitating conditions significantly influence the net benefit, whereas subjective norm and information quality

do not exert significant effects. These results extend the literature on hospital information system success by highlighting that the realization of system benefits in private hospital MCU services is primarily driven by *organizational support* and *ease of system use*, rather than *social pressure* or external expectations.

From a managerial standpoint, the findings suggest that hospitals should prioritize system integration between HIS and supporting platforms such as Radiology Information System (RIS), Laboratory Information System (LIS), and Picture Archiving and Communication System (PACS) to enhance data accessibility and minimize input errors. Management should also strengthen system security through the use of individual user accounts and one-time password (OTP) authentication, while ensuring continuous user training, an active technical helpdesk, and leadership-based usage monitoring to serve as role modeling for digital adoption. These measures are essential to ensure that system utilization genuinely contributes to operational efficiency, workflow optimization, and value creation within MCU services.

To maximize the benefits of the Hospital Information Management System (HIS), hospitals should develop a fully integrated system across all units, standardize data structures and MCU report formats to eliminate redundant manual processes, and strengthen the digital culture through continuous training, feedback loops, and recognition programs for staff who consistently utilize the system. Incorporating HIS usage metrics into employee performance evaluations is also recommended to enhance compliance and organizational commitment toward system adoption.

For future research, it is suggested to include additional variables such as user satisfaction, system use experience, and leadership support to provide a more comprehensive understanding of the success factors influencing HIS implementation within hospital settings.

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