Information System Benefits Improvement Model, Information Quality Through User Satisfaction, Information Quality and Organization At Hospital X

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ABSTRACT : *Hospital Information System aims to provide accurate, timely, and relevant information to support management functions and decision-making in health services in hospitals. This study examines the influence of user satisfaction, information quality, and organizational support on the benefits obtained from SIRS, both directly and indirectly. The approach used in this study is quantitative with the explanatory causality method, and the analysis technique in this study uses Structural Equation Modeling (SEM). The respondents of the study were 198 professional care providers (PPA) who were directly involved in the use of SIRS at the Sultan Agung Islamic Hospital, Banjarbaru. The results of this study indicate that the factors of user satisfaction, information quality, and organizational support have a major influence on the benefits both directly and indirectly received from the use of this system, with a determination coefficient of 84.8%. This means that more than 80% of the benefits obtained by the hospital in using the hospital information system are determined by how satisfied the user is with the system used. This indicates a good relationship between the four factors in increasing the benefits of the hospital information system at RSI Sultan Agung Banjarbaru. Therefore, hospitals are advised not to only focus on developing one aspect, but also to maximize the four aspects in order to provide more optimal results.*

Keywords: Hot-Fit,SIRS Evaluation,Structural Equation Modeling(SEM)

1. INTRODUCTION

In the digital era, the implementation of information technology is key to increasing the efficiency and quality of services in the health sector (Ratna et al. 2021). Hospital Information System (SIRS) plays an important role in the integration of administrative, financial, and clinical information, supporting hospital decision making according to(Primary, 2024). SIRS has been proven to accelerate service and increase patient satisfaction through fast and accurate information access.

Healthcare services in hospitals involve multidisciplinary teams, so job satisfaction becomes an important aspect in human resource management. Job satisfaction directly and indirectly affects productivity, which ultimately contributes to improving the quality of healthcare services to patients.according to(WHO, 2020).

According to Law Number 17 of 2023, hospitals are required to provide safe, quality, anti-discriminatory, and effective services. To support this, hospitals must implement the Hospital Information System (SIRS) and electronic medical record recording.

Information technology is transforming the health sector, especially in health services through electronic medical records (EHRs), which improve the efficiency and quality of services according to(Adler-Milstein & Jha, 2017)The government requires the adoption of

EHRs by December 31, 2023, with a focus on data security and integration. Administrative sanctions are imposed on facilities that do not comply.

Evaluation of information systems using the HOT-Fit method shows that user satisfaction is influenced by system quality and organizational support.(Marisa and all, 2024). The alignment between human, organizational, and technological aspects, supported by adequate training and infrastructure, is important to maximize the benefits of SIRS.(Suryana et al., 2021). The success of HIS also depends on user support, management, training, and the quality of technology.(Puspita et al., 2020) , while regular training and infrastructure improvements can improve the comfort and efficiency of hospital services.

The HOT-Fit method evaluates SIRS performance through four main components: users, organization, technology, and benefits (Net Benefit), with the fit between components as the key to success.(Yusof et al, 2008). User satisfaction analysis can be done using structural equation modeling (SEM), which validates the relationships between variables in a hypothetical model with the help of programs such as AMOS.(Byrne, 2013).

According to data from the Ministry of Health of the Republic of Indonesia dated June 4, 2024, out of a total of 3,174 hospitals, 3,043 have used Electronic Medical Records (EMR), while 131 have not implemented it. Of that number, 2,527 hospitals have been integrated with the SATU SEHAT system, while 647 hospitals have not yet been integrated with the system.

Sultan Agung Islamic Hospital Banjarbaru, a type C hospital in the Citra Grha City Complex, Banjarbaru, South Kalimantan, began operating on March 31, 2021. Standing on 20,000 m² of land with a capacity of 175 beds, this hospital is equipped with superior Eye Center and Urology Center services, supported by 78 doctors, including 47 specialists and 3 subspecialists. Sultan Agung Islamic Hospital Banjarbaruhas implemented the use of the Hospital Information System (SIRS) since 2021. However, the implementation of the Hospital Information System (SIRS) still has challenges such asorganization, lack of managerial support and mismatch between work processes and system features hinder optimization according to(Suryana et al., 2021);(Marisa Putri & Aisyah, 2024). Technologically, the quality of the system does not meet expectations and the limited integration with the old system is an obstacle.(Puspita, 2020); (Istifaiyatuddianah et al., 2021). As a result, the benefits of SIRS have not fully improved operational efficiency and service quality, coupled with the absence of consistent measurement of benefits according to(Marisa et al, 2024).

Based on initial observations (pre-research) conducted by researchers inSultan Agung Islamic Hospital BanjarbaruThere are several problems that occur and can be identified as follows:

1) Forty-two percent of the 20 users surveyed reported that SIRS use was suboptimal. Key issues included a lack of ongoing training, an unintuitive interface, and a disorganized problem reporting system. Initial training with no updates, coupled with a lack of ongoing support, made it difficult for users. An unfriendly interface, inconsistencies in clinical processes, and a lack of flexibility to adapt to hospital workflows reduced the effectiveness of SIRS. Inpatient physicians also found SIRS inefficient in supporting urgent care needs.

2) As many as 58% of the 20 users surveyed reported problems with the quality of SIRS information that was not optimal. The main problems included the lack of continuous evaluation of the system's effectiveness, SIRS functions that did not fully meet the specific needs of hospital units, and training that was not tailored to the tasks of each unit. Poor data integration between units hampered coordination, while staff who were accustomed to manual systems had difficulty adapting to SIRS, especially in inpatient and outpatient units. This reduced the efficiency and quality of service and slowed down adaptation to new technology.

3) As many as 50% of the 20 users surveyed reported organizational issues in the use of SIRS that were not optimal. The main causes include the lack of integration between SIRS and other systems, such as the drug inventory system and electronic medical records, which reduces operational efficiency. The instability of the internet network and hardware in the inpatient and pharmacy units also hampered smooth operations, especially in real-time patient data processing. In addition, the incompatibility of SIRS features with the specific needs of inpatient and outpatient units, such as patient administration management, became an obstacle in supporting optimal patient monitoring.

4) As many as 50% of the 20 users surveyed reported that the benefits of SIRS were still not optimal. The main causes included incomplete or unstructured data due to inconsistent input from medical personnel and inconsistencies in formats between units. Lack of integration with other systems, such as diagnostic or laboratory systems, reduced the completeness of information about patient conditions. In addition, delays in processing large volumes of data and the lack of alignment of the alert system with hospital clinical procedures hindered SIRS from preventing errors and functioning optimally.

Based on data from the results of the implementation of the integration of RME & SATUSEHAT from the Directorate General of Health Services, Ministry of Health, it was stated that hospitals that use Electronic Medical Records from a total of 3,174 hospitals and only 3,043 hospitals have used it and the remaining 131 hospitals have not implemented RME, according to the following table:

Table 1. Use of Hospital Information Systems in Hospitals

Types of Health Facilities	Already RME	Not RME yet	Amount
Hospital	3.043	131	3.174
Amount	3.043	131	3.174

Based on the monitoring data of the implementation of the integration of RME & SATUSEHAT from the Directorate General of Health Services, Ministry of Health, it was stated that hospitals that use Electronic Medical Records and have been integrated with the Satu Sehat system from a total of 3,174 hospitals that have been integrated with the Satu Sehat system amounted to 2,527 and the remaining 647 hospitals have not been integrated with the Satu Sehat System, meaning, according to the following table:

Table 2. The Use of Integrated RME With One Healthy

Types of Health Facilities	Already	Not yet	Amount
Hospital	2,527	647	3.174
Amount	2,527	647	3.174

Based on the explanation above, the author is interested in conducting a study entitled "Analysis of User Satisfaction, Information Quality and Organization of Benefits at the Banjarbaru Islamic Hospital".

The human aspect component is to evaluate the information system from the system user's perspective, according to the frequency and breadth of functions, and information system research.(Yusof, MM, 2006). The use of the system also depends on who uses it, the level of user, training, knowledge, expectations, and the attitude of acceptance or resistance to the system. The system also evaluates these components in terms of user satisfaction.

According to research conducted by(Larinse, 2020)Users can be linked to the perception of usefulness and user attitudes towards information systems which are influenced by

individual characteristics. Meanwhile, according to research from (Nofierni et al., 2021), users of a good infrastructure system can increase the comfort and efficiency of services in hospitals.

A study conducted by(Erlirianto et al., 2015a)with the title "The Implementation of the Human, Organization, and Technology–Fit (HOT–Fit) Framework to Evaluate the Electronic Medical Record (EMR) System in a Hospital," the results of the study found that the human aspect has a positive influence on the Electronic Medical Record (EMR) and is also the key to the success of the technology owned by a hospital.

The organizational component will evaluate the system in terms of the organizational structure and organizational environment in which the information technology system is theoretically implemented.(Erlirianto et al., 2015a). Research conducted by(Lynn et al., 2018)The results of this study found that organizational factors significantly influence an organization's cloud computing adoption decisions for high performance computing (HPC).

According to the theory put forward by(Yusof, MM, 2006)Technology is a set of means of providing goods needed for the existence and comfort of human life. Research(Mehrbakhsh Nilashi, Hossein Ahmadi, Ali Ahani, Othman Ibrahim, 2015)shows that technology factors significantly influence organizational decisions for high performance computing (HPC).Information technology has an important role in today's health services. According to(Ratna et al. 2021) Information technology has become one of the fastest growing innovations.

Research by(Widy Try Windy, 2020)shows that the perception of HIS officers at RSU Undata, Central Sulawesi Province regarding human factors (64.9%), organization (88.3%), and technology (86.0%) is quite good. However, there are still shortcomings, especially for old users, such as the SIRS application which sometimes experiences errors.

2. RESEARCH METHODS

This study uses a quantitative research method with the type of research being explanatory causality. The data collection method is a survey, the researcher selects a number of respondents as samples and submits a list of questions (questionnaires). The research location is a place or object for conducting research. The research location is at RSI Banjarbaru for a period of 3 months, namely June August 2024
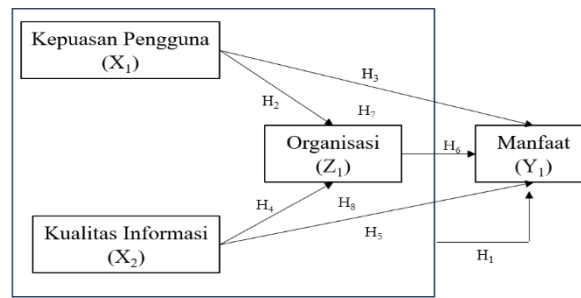
Figure 1. Research Constellation

The population in this study were all professional care providers (PPA) who used SIRS at Sultan Agung Islamic Hospital, Banjarbaru, namely General Practitioners, Specialist Doctors, Nurses, Midwives, Pharmaceutical Analysts, and Pharmacists.180 respondents from a total population of 325 direct users, plus 18 samples or 10% of the sample for risk of dropping out during the study. According to(Sastroasmoro & Ismael, 1995) The drop out criteria are respondents who are not directly involved in the research respondents, but are direct users of SIRS who are included in the population count, so they are reserved for increasing the number of respondents to 198 respondents.using the slovin formula and purposive sampling technique. The sample criteria in this study were information system users who worked at RSI Banjarbaru, had a minimum high school education, and information system users with a work period of more than 1 year and interacted with SIRS at RSI Banjarbaru for 1 year.

The data in this study were collected through a questionnaire distributed to respondents. The research questionnaire consisted of 26 question items divided into four variables, namely User Satisfaction, Information Quality, Organization, Technology and Benefits. The research questionnaire was compiled by submitting closed statements and answer choices to be submitted to the research sample with a Likert scale interval of 1-4. The questionnaire contained questions about the characteristics of respondents including gender, age, education, length of service, and length of use of SIRS.

Before conducting research with the saturated samples studied, the researcher conducted validity and reliability tests using SEM AMOS with the method*Product Moment*, to determine whether the questionnaire is valid and reliable or not.

In this study, the validity test uses the instrument reliability test processed using the AMOS software program. In the validity test, a variable is declared valid and can be analyzed further ifAn indicator is said to be valid if it has a Loading Factor (SLF) above 0.5..total 65 samples, while the testReliability It is said to be reliable if the construct value of reliability > 0.7(Ghozali, 2014);(Ghozali, 2011).obtained as follows:

Table 3. Reliability Test Results

Variables	*Composite Reliability*	Information
Organization (Z)	0.971	Reliable
User Satisfaction (X1)	0.973	Reliable
Information Quality (X2)	0.988	Reliable
Benefits (Y)	0.986	Reliable

Based on Table 3. Reliability Test Results The reliability test results show that each variable has a value*composite reliability*above 0.70, Therefore, it can be interpreted that the instrument for each variable is reliable. This means that the instrument used has consistency as a measuring tool.

Then, after the questions were declared valid and reliable, the researcher conducted sampling using descriptive data analysis techniques using the Three Box Method which divided the question score items into low, medium and high and hypothesis testing techniques using SEM AMOS.

3. RESULTS AND DISCUSSION

Results

The number of respondents based on work units obtained the most came from the outpatient unit, which was 121 employees or 61.1%, while the inpatient unit was 77 employees or 38.9%. This shows that the outpatient unit has a larger number of employees compared to the inpatient unit.

The number of respondents based on profession obtained the most were nurses, namely 134 employees or 67.7%, followed by midwives, namely 19 people or 9.6%, then general practitioners, namely 17 people or 8.6%, then specialist doctors, namely 15 people or 7.6%, pharmaceutical technical personnel as many as 10 people or 5.1%, and the least profession as pharmacists, namely 3 people or 1.5%. This shows that the number of respondents who use the hospital information system (SIRS) is dominated by nurses, midwives, and general practitioners.

The number of respondents based on age obtained the most is 25-35 years old, which is 104 employees or 52.5%, followed by 36-45 years old, which is 69 employees or 34.8%, then

at the age of less than 25 years, which is 23 employees or 11.6%, and 46-55 years old, as many as 2 employees or 10.1%. This shows that the 25-35 age group is the majority in using SIRS.

The number of respondents based on gender obtained the most were female, namely 158 employees or 79.8%, while male respondents were 40 employees or 20.2%. This shows that female employees are the majority in using and operating SIRS.

The number of respondents based on education obtained the most is the S1 level, which is 96 employees or 48.5%, then at the D3 level, which is 76 employees or 38.4%, then at the D4 level, which is 18 employees or 9.1%, and the S2 level, which is 8 employees or 4.0%. This shows that employees who use and operate SIRS mostly have a S1 education level, followed by a D3 education level.

The number of respondents based on the length of service obtained was the most 1-3 years, which was 129 employees or 65.2%, while respondents with a length of service of less than 1 year were 69 employees or 34.8%. This shows that the employees who use and operate SIRS the most are employees with a length of service of 1-3 years at the Outpatient RSI Sultan Agung Banjarbaru.

The number of respondents based on the length of use of SIRS obtained the most 1-3 years as many as 198 employees or 65.2%, while those who used less than 1 year were 69 employees or 34.8%. This shows that the majority of employees have used SIRS for 1-3 years.

Researchers analyze using descriptive analysis, which is an analysis technique that obtains an overview of respondents' answers regarding the research variables used.This analysis was conducted using the Index Analysis Technique Based on the average Three Box Method score index, the average score for each variable was obtained as follows:

Table 4. Three-box Method Matrix

Variables	Score			Behavior
	Low	Currently	Tall	
Organization			✓	Support
User Satisfaction			✓	Feeling Satisfied
Information Quality			✓	Quality
Benefit			✓	Beneficial

The average score of the research variable index >70% indicates a positive perception or evaluation of the hospital information system (SIRS). Based on the three box method, the score is in the high category, reflecting a good user view of the performance, ease, and benefits of SIRS in line with research (Lestari et al., 2020)

P-value: probability value (probability value or chance) or a value that shows the chance of a data to be generalized in the population, namely 5% wrong decisions and then taking 95% correct decisions(Ghozali, 2016).The following are the results of the tests that have been carried out:
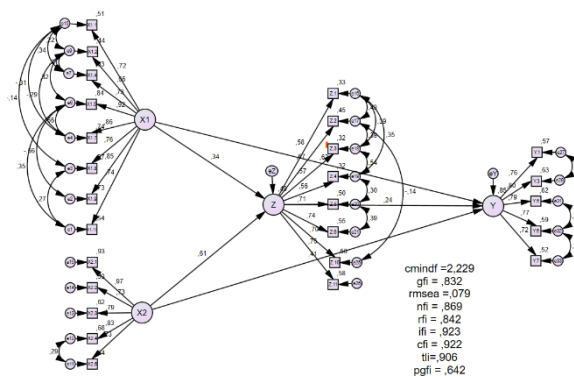
Figure 2. Path Diagram Structural Model

Hypothesis Testing Stage

Simultaneous Test

The purpose of simultaneous testing is to determine whether the independent variables together have a significant influence on the dependent variable in a research model.(Sugiyono, 2013);(Ghozali, 2016). Simultaneous test shows that the variables of User Satisfaction, Information Quality, and Organization simultaneously have a significant effect on SIRS Benefits, with an R² value of 94%. The calculation results produce a value of Fcount = 269.184, which is greater than Ftable = 2.651, thus stating that there is a simultaneous influence of the three variables on the SIRS Benefits received.**H1 accepted**

Intervening Test

Partial hypothesis test (t-test) is used to measure the direction and significance of the direct relationship between endogenous and exogenous variables. With a significance level of 5%, the relationship is considered significant if the probability value is <0.05.(Surucu et al., 2020). The following are the results of the hypothesis test of this study.

Table 5. Recapitulation of Interving Effect Testing

Variables	Coef	P	Information
X1 --> Z --> Y	0.081	0.029	H7= Accepted
X2 --> Z --> Y	0.146	0.028	H8= Accepted

1) The results of the intervening influence test show that the User Satisfaction variable has a significant influence on Benefits through the Organization as a mediator, with a coefficient of 0.081 and a p-value of 0.029 (<0.05). The role of the organization strengthens the relationship between user satisfaction and benefits, making it more optimal than a direct relationship without a mediator. Thus, H7 is accepted.

2) The information quality variable has a significant influence on benefits through the role of the organization as an intervening variable, with a coefficient of 0.146 and a p-value of 0.028 ($p < 0.05$). The role of the organization strengthens the relationship between information quality and benefits, making it more optimal than direct influence without the organization. Therefore, H8 is accepted.

Partial Test

Partial hypothesis test (t-test) is used to measure the direction and significance of the direct relationship between endogenous and exogenous variables. With a significance level of 5%, the relationship is considered significant if the probability value is <0.05.(Surucu et al., 2020). The following are the results of the hypothesis test of this study.

Table 6. Recapitulation of Direct Influence Testing

Variables	Coefficient	P	Information
X1 --> Z	0.342	0	H2= Accepted
X1 --> Y	0.631	0	H3= Accepted
X2 --> Z	0.614	0	H4= Accepted
X2 --> Y	0.413	0	H5= Accepted
Z --> Y	0.237	0.002	H6= Accepted

1. The influence of user satisfaction on the organization produces a p value of 0.000. The test results show that the p value is smaller than 0.05. This means that there is a significant

influence of user satisfaction on the organization. The coefficient value of 0.342 shows that user satisfaction has a positive influence, meaning that the higher the value of the user satisfaction factor, the higher the organization and vice versa. H2 is accepted

2. The effect of user satisfaction on benefits produces a p value of 0.000. The test results show that the p value is smaller than 0.05. This means that there is a significant effect of user satisfaction on benefits. The coefficient value of 0.631 shows that user satisfaction has a positive effect, meaning that the higher the value of the user satisfaction factor, the higher the benefits and vice versa. H3 is accepted

3. The influence of information quality on the organization produces a p value of 0.000. The test results show that the p value is smaller than 0.05. This means that there is a significant influence of information quality on the organization. The coefficient value of 0.614 shows that information quality has a positive influence, meaning that the higher the value of the information quality factor, the higher the organization and vice versa. H4 is accepted

4. The influence of information quality on benefits produces a p value of 0.000. The test results show that the p value is smaller than 0.05. This means that there is a significant influence of information quality on benefits. The coefficient value of 0.413 shows that information quality has a positive influence, meaning that the higher the value of the information quality factor, the higher the benefits of using SIRS and vice versa. H5 is accepted.

5. The influence of the organization on benefits produces a p value of 0.002. The test results show that the p value is smaller than 0.05. This means that there is a significant influence of the organization on benefits. The coefficient value of 0.237 indicates a positive influence, meaning that the higher the value of the organizational factor, the higher the benefits of using SIRS and vice versa. H6 is accepted.

Coefficient of Determination (R Square)

The coefficient of determination (R^2) measures the influence of the independent variable on the dependent variable in a regression model, with values ranging from 0 to 1. An R^2 value = 0 means that the independent variable does not explain the variation in the dependent variable, while an $R^2 = 1$ indicates that the model can explain 100% of the variation. The higher the R^2 value, the better the model explains the dependent variable. Conversely, a low R^2 value indicates a limited contribution of the independent variable. For example, $R^2 = 0.75$ indicates that 75% of the variation in the dependent variable is explained by the independent variable,

the remaining 25% by other factors.(Hair, JR, & Sasterdt, 2011; Sarstedt et al., 2020; Schuenemeyer et al., 1989). The following are the results of the coefficient of determination:

Table 7. Recapitulation of Determination Coefficient

Variables	CoefficientDetermination
Organization (Z)	0.494
Benefits (Y)	0.848

1) The determination coefficient of 0.494 shows that 49.4% of the variation in organizational performance is explained by user satisfaction from the implementation of SIRS at Sultan Agung Islamic Hospital, Banjarbaru, indicating that increasing user satisfaction with SIRS significantly contributes to increasing organizational performance.

2) The coefficient of determination of 0.848 indicates that 84.8% of the variation in the benefits of implementing SIRS at RS Islam Sultan Agung Banjarbaru is explained by user satisfaction, information quality, and organizational support. These factors have a major influence in optimizing the benefits of SIRS for hospitals.

Table 8. Hypothesis Recapitulation Results

No	Hypothesis	Information
1	User Satisfaction, Organization and Information Quality Simultaneously Influence Benefits	H1= Accepted
2	User Satisfaction Influences Benefits With Organization as Intervening Variable	H2= Accepted
3	Information Quality Affects Benefits with Organization as an Intervening Variable	H3= Accepted
4	User Satisfaction Impacts Organization	H4= Accepted
5	User Satisfaction Affects Benefits	H5= Accepted
6	Information Quality Affects Organizations	H6= Accepted
7	Information Quality Affects Benefits	H7= Accepted
8	Organizations Influence Benefits	H8= Accepted

4. DISCUSSION

1. User Satisfaction, Organization and Information Quality Simultaneously Influence Benefits

There is a simultaneous influence of User Satisfaction, Information Quality, and Organizational Support on the Benefits of SIRS, as evidenced by the calculated F value of 269.184 which exceeds the F table of 2.651, and the coefficient of determination of 84.8%.

This shows that the implementation of SIRS at RS Islam Sultan Agung Banjarbaru is greatly influenced by these factors. The higher the user satisfaction, information quality, and organizational support, the greater the benefits felt from this system. The results of the three box analysis show that the four variables, namely User Satisfaction, Information Quality, and Organization, are in the high category, in line with the achievement of the Benefit variable which is also in the high category. Based on the frequency distribution of each answer, it was also found that respondents tended to choose the answer "agree" (choice 4) on each variable item. This shows that the benefits of SIRS are felt very well by direct users because of the level of User Satisfaction, Information Quality and Organization that supports.

The results of the analysis show that User Satisfaction, Information Quality, and Organizational Support simultaneously have a significant influence on SIRS Benefits, in accordance with the theory. (Yusof, 2008)And(DeLone & McLean, 2003)which states that system quality, information quality, and user satisfaction are key factors for the success of information systems. Research (Suryana et al., 2021)also supports this finding, by showing the influence of human, organizational, technological, knowledge, and regulatory factors on the benefits of SIRS at RSPI Prof. Dr. Sulianti Saroso. The continuity of these factors contributes to the increase in the benefits of SIRS.

Study(Windy et al, 2020) shows that the perception of HIS officers at RSU Undata Central Sulawesi towards human factors reached 64.9%, organization 88.3%, and technology 86.0%. Although in general the perception is good, there are still shortcomings in old users, and the SIRS application sometimes experiences errors.

2. **Information Quality Affects Benefits with Organization as an Intervening Variable**

The results of the intervening influence test show that the user satisfaction variable has a significant influence on benefits through the role of the organization as an intermediary variable, with a coefficient of 0.081 and a p-value of 0.029 (below 0.05), meaning that the relationship between user satisfaction and benefits becomes stronger when the organization is involved in the use of SIRS in hospitals. The coefficient of 0.081 indicates that the contribution of user satisfaction to benefits increases with the role of the organization as a mediator. Thus, the organization functions as an important link that maximizes the influence of user satisfaction on benefits, so that the benefits felt are more optimal than if the relationship occurs directly between user satisfaction and benefits without the role of the organization.

This finding is in line with the Socio-Technical Systems theory (Emery & Trist, 1960), Technology-Organization-Environment (TOE) Framework (Tornatzky & Fleischer, 1990), and Theory of Planned Behavior (Ajzen, 1991). These theories emphasize the importance of the

organization's role in integrating technological and human aspects to maximize system benefits. In this context, the organization is not only a mediator but also an important link that strengthens the influence of user satisfaction variables on benefits, creating better system effectiveness. Research by(Yusof, 2008) supports this finding by highlighting the importance of user satisfaction in the context of health information systems. This study shows that high user satisfaction contributes significantly to increased organizational benefits through good organizational support.

This finding is in line with the theory(Yusof, Kuljis, et al., 2008)And(DeLone & McLean, 2003)which emphasizes the importance of the organization's role in integrating technological and human aspects to maximize system benefits. In this case, the organization functions not only as a mediator but also as an important link that strengthens the influence of user satisfaction on benefits, thereby creating better system effectiveness. Research by(Ku & Yu, 2024);(Zayyad & Toycan, 2018)support these findings by highlighting the importance of user satisfaction in the context of health information systems. These studies show that high user satisfaction significantly contributes to increased organizational benefits through good organizational support.

3. **Information Quality Affects Benefits with Organization as an Intervening Variable**

The results of the intervening influence test show that the information quality variable has a significant influence on the benefit variable through the role of the organization as an intervening variable, with a coefficient of 0.146 and a p-value of 0.028 (less than 0.05), meaning that the relationship between information quality and benefits becomes stronger with the role of the organization in the use of SIRS in hospitals. The coefficient of 0.146 shows that the contribution of information quality to benefits increases when the organization variable functions as a mediator in this relationship. Thus, the organization plays an important role in strengthening the influence of information quality on benefits, so that the benefits received are more optimal compared to the direct influence between information quality and benefits without involving the organization.

The research results are in line with several theories from (Manuel & Magalhães R, 1999);(Brown, 2019);(Yusof, 2008);(Siqueira et al., 2022)And(DeLone & McLean, 2003)highlighted the role of organizations as important mediators in strengthening the impact of information quality on benefits in Hospital Information Systems (SIRS). Thus, the role of organizations is proven to be very important in mediating and optimizing the contribution of information quality to SIRS benefits, providing a strong basis for more effective SIRS implementation in hospitals. In addition, according to various studies from(Ku & Yu,

2024);(Kankam et al., 2023);(Muhanga & Haule, 2021);(Rahi et al., 2021)And(Kraus et al., 2021) shows that Information quality has a significant effect on SIRS benefits, with the role of the organization as a mediator that strengthens its impact. Organizations are a key component in utilizing quality information to improve the effectiveness and efficiency of health services.

4. The Impact of User Satisfaction on Organizations

There is a significant positive influence of the user satisfaction factor variable on the organization,with a p-value of 0.000 (less than 0.05) and a coefficient of 0.342. This shows that the higher the user satisfaction, the better the organizational performance, and vice versa. Based on the three box analysis, the user satisfaction factor is in the high category, which directly contributes to improving organizational performance through the use of SIRS. Users who are able to operate SIRS optimally encourage work efficiency and improve coordination between units. An integrated system facilitates access to information and speeds up the work process, making work more flexible. This not only increases the benefits of SIRS for the organization but also supports the hospital in providing the best service. Ultimately, increasing user satisfaction and organizational performance will have a positive impact on overall customer satisfaction.

Research is in line with(DeLone & McLean, 2003)shows that user satisfaction plays an important role in increasing the benefits of information systems, especially in the context of SIRS. High satisfaction increases system effectiveness, work flexibility, and communication, which have a positive impact on hospital performance and services. In addition, the HOT-Fit Theory (Yusof, 2006)emphasizes that the success of implementing a health information system depends on the elements of Human, Organization, and Technology. The "Human" element or user satisfaction has been shown to increase the benefits of the system, supported by findings(Xu et al., 2022)which states that satisfied users tend to maximize system usage, in line with the HOT-Fit principle.

5. The Influence of User Satisfaction on SIRS Benefits

There is a significant positive influence of the user satisfaction factor variable on benefits with a p value of 0.000 (less than 0.05) and a coefficient of 0.631. This shows that the higher the value of the user satisfaction factor, the higher the benefit value will be and vice versa. The three box results show that the factoruser satisfaction has a high category achievement so that it will encourage high benefits from the use of SIRS. Users who can operate SIRS well will encourage hospital performance and services.This high level of user satisfaction supports hospital performance by increasing operational efficiency, ease of access to information between units, and flexibility of work and staff collaboration, so that SIRS plays an important

role not only as an administrative tool but also in improving the quality of hospital services as a whole.

The results of this study are in line with(Airo Dhanaris Simorangkir, 2020) which states that human variables influence benefits in the case study of SIRS implementation at Dinda Hospital, Tangerang. This research is also in line with(Andika Bayu S and Izzati Muhimmah, 2013)and (Suryana et all, 2021) who stated that human factors influence the success of SIRS implementation in hospitals.   According to theory(Yusof, 2006);(DeLone & McLean, 2003)And(Davis, 1989) shows that human components assess information systems through system use, such as frequency, function, training, motivation, and user attitudes. User satisfaction, which is influenced by personal characteristics, is closely related to the benefits and attitudes toward the system. This study also adds a system development variable, showing that user interaction with the system has a direct impact on the added value of the organization. This finding is reinforced by research(Al Qudah et al., 2020);(Yan et al, 2020)And(Erlirianto et al., 2015b) which emphasizes that user satisfaction with information quality is a key factor in optimizing the benefits of information systems, including in the implementation of e-Government.

6.   Information Quality Affects Organizations

There is a significant influence of information quality on organizational performance, with a p value of 0.000 (less than 0.05) and a coefficient of 0.614. In the three box results, information quality is in the high category, which means that the quality of information produced by SIRS has provided real benefits to the organization. The better the quality of information provided by SIRS, the greater the increase in organizational performance that can be achieved. With this, SIRS which is able to provide accurate, relevant, and easily accessible data will support more precise decision making and more efficient operations in the organization.

This research is in line with(DeLone & McLean, 2003)stated that information quality is one of the key dimensions that contributes to the success of information systems and organizational efficiency, while according to(Petter et al, 2008)Affirming that high quality information increases the effectiveness of work and coordination between units in the organization and according to. From this, the quality of information is a strategic element that must be prioritized in the implementation of SIRS to support the overall goals of the organization.(Martinho et al., 2015);(Sanjuluca et al., 2022)And(Yusof et al., 2006).

7. Information Quality Affects Benefits

There is a significant positive influence between the information quality factor and benefits, with a p value of 0.000 (less than 0.05) and a coefficient of 0.413. This shows that the higher the quality of information provided, the greater the benefits obtained from using SIRS. The three box results show that the quality of information is in the high category, which supports a significant increase in SIRS benefits. The speed of access and the latest technology in SIMRS services increase the ease of employees in accessing information and providing the best service. The presentation of data that is always updated and data security that is maintained increases the completeness of information and employee comfort in working and accessing information.

This research is in line with(Al Qudah et al., 2020);(Alzahrani et al., 2019)And(Suryana et al., 2021)emphasize the importance of understanding the variables that influence the success of information systems, including information quality. They found that high information quality not only increases user satisfaction but also contributes to increased benefits derived from information systems. While the Theory(Venkatesh et al., 2003);(Yusof, 2008); And(Petter, DeLone, et al., 2008)also support this view by stating that information quality plays a significant role in determining the acceptance and use of technology, which ultimately affects the benefits derived by users and organizations. Overall, these findings suggest that improving information quality is an important strategy for increasing the benefits derived from hospital information systems.

8. The Influence of Organization on SIRS Benefits

There is a significant positive influence of the organizational factor variable on the benefits of SIRS with a p value of 0.002 (less than 0.05) and a coefficient of 0.237. This shows that the higher the value of the organizational factor, the greater the benefits will be and vice versa. The results of the three boxes show that the organizational factorThe organization has achievements in the high category so that it will encourage high benefits from the use of SIRS. The support of the hospital management and good technical support from the hospital in utilizing SIRS will maximize the benefits of SIRS so that service activities in the hospital can run well too. The support from the hospital regarding network facilities and the support of good hardware and software will increase hospital productivity and overall will increase the benefits of using SIRS.

The results of this study are in line with research(Lourent Monalizabeth Erlirianto, Ahmad Holil Noor Ali, 2015)which states thatorganizational aspects consisting of structure and environment, provide a positive and significant influence on the implementation of

information systems in hospitals. This research is also in line with(Lynn, Theo; Liang, Xiaoning; Gourinovitch, Anna; Morrison, John P.; Fox, Grace; Rosati, 2018) who found that organizational factors significantly influence an organization's cloud computing adoption decisions for*high performance computing*(HPC).Research by(Yusof, 2008)supports this view by showing that a good organizational environment, including adequate management support and infrastructure, greatly contributes to maximizing the benefits of information systems. Furthermore, according to(Petter, Delone, et al., 2008);(Al Qudah et al., 2020);(Alzahrani et al., 2019)And(Widy Try Windy, 2020)A conducive environment will increase the acceptance and benefits that organizations obtain from information systems, so creating a culture that supports technological change is an important strategy for achieving information systems success.

5. CONCLUSION AND SUGGESTIONS

Conclusion

1. There issimultaneous influence User Satisfaction, Information Quality, and Organizational Support for the Benefits of Hospital Information Systems (SIRS) at Sultan Agung Islamic Hospital, Banjarbaru. This means that to increase the Benefits of Using SIRS, it can be improved through improvements in terms of User Satisfaction, Information Quality, and Organizational Performance.

2. There is a significant influence fromuser satisfaction with the benefits of the Hospital Information System (SIRS) at Sultan Agung Islamic Hospital. This means that to improve organizational performance, efforts can be made to improve user satisfaction.

3. There is a significant influence fromuser satisfaction with the benefits of using the Hospital Information System (SIRS) at the Sultan Agung Islamic Hospital, Banjarbaru. This means that to increase the benefits of SIRS, efforts can be made to improve user satisfaction.

4. There is a significant influence frominformation quality on organizational performance at Sultan Agung Islamic Hospital. Good information quality plays an important role in achieving optimal benefits from the Hospital Information System (SIRS).

5. There is a significant influence fromquality of information on the benefits of using the Hospital Information System (SIRS). Improving the quality of information will drive the efficiency and effectiveness of the system, which will have an impact on the overall performance of the organization.

6. There is a significant influence fromorganizational environment towards the benefits of Hospital Information Systems (SIRS). Organizational support is very important to achieve optimal benefits from information systems in hospitals.

7. There is a significant influence fromuser satisfaction with the benefits of the Hospital Information System (SIRS), with organizational support as an intervening variable. Organizational support strengthens the relationship between user satisfaction and SIRS benefits.

8. There is a significant influence from quality of information on the benefits of using the Hospital Information System (SIRS), where the organization acts as an intervening variable. Organizational support and high-quality information maximize the benefits of SIRS in hospitals.

Suggestion

Based on the results of research that has been conducted regarding the implementation of SIMRS, the following suggestions can be given:

1. For the RSI Sultan Agung Banjarbaru party

- Hospitals need to improve the skills of IT HR to conduct technical audits of hardware and systems and ensure the capacity of hospital networks and servers, such as increasing internet bandwidth and updating outdated hardware to support better SIRS quality.

- SIRS integration needs to be done with other systems, namely electronic medical record systems and financial systems to provide more detailed and integrated data. In the integration process, it must be ensured that the data input process is carried out accurately with an automatic data validation mechanism to avoid incomplete information.

- Hospitals need to hold regular training or seminars for staff, especially regarding the latest regulations from the Ministry of Health regarding SIRS. In addition, it is also necessary to form a compliance team tasked with ensuring that the implementation of SIRS is in accordance with government regulations as an effort to monitor and comply with officers and is expected to make the implementation of SIRS in accordance with the established standards.

- To improve the effectiveness of SIRS implementation, hospitals need to conduct routine SIRS training for Professional Care Providers (PPA) in accordance with service governance and simulations for all staff so that they understand how to use SIRS optimally. In addition, use key performance indicators (KPIs) to assess the impact of

SIRS on hospital operations, such as reducing data processing time or increasing the speed of patient service.

2. For further researchers, this research can be further developed by analyzing how other variables influence benefits. In addition, it can also analyze how user satisfaction and information quality variables influence if they become mediating variables.

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