


An Evaluation Of The Implementation Hospital Management Information System (SIMRS Transmedic) Using Hot-Fit Method At Hospital Royal Prima Medan

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Article Info	ABSTRACT
Keywords: Hospital, SIMRS, HOT-FIT	Entering the digital era, technological developments are increasingly rapid in various fields including the health sector. Information systems have a significant role in organizational success. In an effort to improve health services in hospitals, it is necessary to look at the current performance of SIMRS to find out the positive aspects that encourage system use and identify factors that create obstacles. The aim of this research is to evaluate implementation of the use of a hospital management information system (SIMRS) on user satisfaction at RSU Royal Prima Medan using the HOT -Fit method. This type of research is quantitative research with a Cross Sectional approach. Population in this study consisting of active employees from each division who interact with the system with a total of 432 people. The number of samples in this study was taken from several divisions with a total of 168 samples. Data analysis uses univariate, bivariate and multivariate analysis. The research results show partially There is an influence of system quality, information quality, service quality, organizational structure, facility conditions, and leadership support on user satisfaction of the Hospital Management Information System (SIMRS) at RSU Royal Prima Medan with a p -value < 0.05. Simultaneously or together the independent variables in this study have an effect on users of the Hospital Management Information System (SIMRS) at RSU Royal Prima Medan p-value < 0.05. The independent variable that has the most influence on users of the Hospital Management Information System (SIMRS) at RSU Royal Prima Medan is the leadership support variable. Advice for hospitals Hospitals should evaluate SIMRS more frequently so that they can assess and measure the benefits obtained and find problems that are being faced by users and organizations and can be used as a reference to improve and perfect SIMRS so that it becomes even better.
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INTRODUCTION

Hospitals are complex, professional and capital-intensive medical facilities. This complexity arises because hospital services include various service, education and research functions, covering various behavioral and medical disciplines (Anang, 2021). For hospitals to perform such complex tasks, they need specialized staff in the fields of medical technology and

healthcare. According to the Regulation of the Minister of Health of the Republic of Indonesia Number 46 of 2014 concerning Health Information Systems, the main function of hospitals is to provide and organize medical services for the healing and recovery of patients (Anang, 2021).

Entering the digital era, technological developments are increasingly rapid in various fields including the health sector. Information systems have a significant role in organizational success (Farhan, 2022). Hospitals are complex organizations, requiring the support of information technology systems that are complete, accurate and in accordance with the hospital's needs and objectives to support its operational activities so that they run effectively and efficiently (Farhan, 2022).

The use of information technology has now become a need and demand for all public service providers. Hospitals are no exception, as one of the agencies that provides public services and serves the community well, it is necessary to have good information system management (Muhammad and Arief, 2020). Information technology is a form of assistance and plays a very important role in improving the quality and quality of services (Rizky, 2022).

Based on the regulation of the Minister of Health of the Republic of Indonesia Number 82 of 2013, it is stated that "Every Hospital is obliged to organize a Hospital Information System (SIMRS)". The Hospital Management Information System (SIMRS) is an effort to present information that is accurate, timely and as needed to support the process of management functions and decision making in providing health services in hospitals (Velicia, 2021).

The application of SIMRS is a collection of interrelated subsystems that coordinate their work with each other, an effort to achieve the goal of implementing SIMRS, which is to process information into data needed to support hospital services and determine hospital management decisions (Dien, 2018).

In an effort to improve health services in hospitals, it is necessary to look at the current performance of SIMRS to find out the positive aspects that encourage system use and identify factors that create obstacles (Velicia, 2021). The evaluation covers various aspects of the use of information and communication technology. With this evaluation, hospitals can develop SIMRS by considering user needs and factors that influence use and the benefits obtained. Therefore, the application of SIMRS aims to find out and assess the benefits obtained, as well as finding problems being faced by users and organizations (Putra, 2020).

Information system evaluation is a real effort to find out the actual situation of information system implementation. With this evaluation, implementation achievements of the information system can be identified and other actions can be planned to increase the effectiveness of the implementation of the information system (Abda'u et al. 2018). Evaluating health information systems does not only consider technological aspects, but also considers human and organizational aspects. One evaluation model used to assess health information systems is using the HOT-Fit (Human Organization Technology-Fit) Model.

The HOT-Fit method was adopted from the DeLone and Mclean 2003 Information Systems Success Model and the IT-Organization Fit Model. This model is used to classify evaluation factors, dimensions and measures. Meanwhile, the IT-Organization Fit model is used to combine the concept of suitability of evaluation factors, namely, user, organization and technology. The HOT-Fit model is equipped with organizational aspects to ensure technology supports organizational goals (Rizky, 2022).

By looking at the whole system by placing important components in the information system, namely humans, organizations and technology and the suitability of relationships between them as determining factors for the success of implementing an information system (Supriyono, 2017). The problems that occur at RSU Royal Prima Medan are related to the three core components of the information system, namely humans, organization and technology. Lack of human resources related to the human component, SIMRS management structure that is not yet clear related to the organizational component, and insufficient supporting equipment related to technology. So, the evaluation model that is suitable for use in SIMRS evaluation at RSU Royal Prima Medan is the HOT-FIT Evaluation Model.

Because, this model can be used to evaluate information systems in the health sector which focuses on the core components of the information system, namely Human, Organization and Technology (Annisa, 2020). Based on this background, researchers are interested in conducting research on "Evaluation of the Implementation of the Use of Hospital Management Information Systems (SIMRS) on User Satisfaction at RSU Royal Prima Medan Using the HOT-Fit Method".

METHOD

Consisting of strongly disagree (STS) with a weight of 1, disagree (TS) with a weight of 2, disagree (KS) with a weight of 3, agree (S) with a weight of 4 and strongly agree (SS) with a weight of 5. Furthermore, to ensure the validity and reliability of this questionnaire, the researcher adopted a number of indicator items from a number of previous related studies. This study uses the HOT-Fit (Human, Organization, and Technology Fit) method which focuses on three main elements in evaluating the success of the implementation of the Hospital Management Information System (SIMRS). This method includes human, organizational, and technological aspects, which are assessed holistically to obtain a comprehensive picture of the effectiveness and impact of the system implemented. The following is an explanation of each aspect:

a. Human (Human)

where User Evaluation Measures the level of satisfaction, acceptance, and competence of users towards the use of SIMRS TransMedic. where Indicators to provide Ease of use of the system provided Training given to staff. as well as User Readiness in adopting new technology.

b. Data Collection Methods

Questionnaire to measure user perceptions of the benefits and ease of the system. In-depth interviews with users such as doctors, nurses, and hospital administration.

Organization (Organization) Operational Process Evaluation: Measures the extent to

which SIMRS TransMedic supports business processes and decision making at RS Royal Prima Medan.

c. Indicators

Efficiency of hospital operational processes (eg, patient registration, scheduling, medical record management). Management support for SIMRS implementation. System suitability to organizational needs.

d. Data Collection Method

Document analysis on hospital workflow before and after SIMRS implementation. Observation of hospital operational activities. Technology Performance Evaluation: Assess system quality, availability, and reliability of SIMRS Trans Medic.

e. Indicators

Speed of data access and processing. Level of patient data security. Integration with other devices (eg, laboratory and pharmacy).

The evaluation results from the three aspects will be analyzed using quantitative (statistical analysis) and qualitative (thematic) methods. Next, the data will be compared to see the fit between humans, organizations, and technology based on the HOT-Fit model.

RESULTS AND DISCUSSION

The Influence of System Quality on User Satisfaction of the Hospital Management Information System (SIMRS) at RSU Royal Prima Medan

Results of research on the influence of system quality on user satisfaction of the hospital management information system (SIMRS) at RSU Royal Prima Medan. The results obtained from the cross table show that if the quality of the SIMRS system is good then there are 128 users who feel satisfied with a percentage of 76.2% and the users who feel dissatisfied are 25 users with a percentage of 14.9%, and if the quality of the SIMRS system is not Well, 8 users were satisfied with a percentage of 4.8% and 7 users were dissatisfied with a percentage of 4.2%.

Test results *chi square* value results are obtained *p-value* of $0.010 < 0.05$ which means there is influence of system quality on user satisfaction of the hospital management information system (SIMRS) at RSU Royal Prima Medan. The results of this research are in line with research conducted by Yulianto et al. (2021), and Lestariningsih et al, (2020) which state that system quality has a positive effect on user satisfaction. The ease of operating the system influences user satisfaction to support work in processing data and information. The frequency of use of a system is influenced by the simplicity of the technology. In addition, ease of learning influences ease of use, while ease of use influences usability.

Research results about The influence of information quality on user satisfaction of the hospital management information system (SIMRS) at RSU Royal Prima Medan. The results from the cross table show that if the quality of SIMRS information is good then there are 122 users who feel satisfied with a percentage of 72.6% and 12 users who feel dissatisfied with a percentage of 7.1%, and if the quality of SIMRS information is not Well, 14 users were satisfied with a percentage of 8.3% and 20 users were dissatisfied with a percentage of 11.9%.

Test results *chi square* value results are obtained *p-value* of $0.000 < 0.05$ which means there is influence of information quality on user satisfaction of the hospital management information system (SIMRS) at RSU Royal Prima Medan. Factors used to evaluate information quality include accuracy, timeliness, completeness, availability, relevance, consistency, and data input. The quality of information in an information system can be said to be very good if information quality standards have been met. To obtain high quality data for use, the quality of the system must be improved so that it can produce high quality data for its users.

The Influence of Service Quality on User Satisfaction of the Hospital Management Information System (SIMRS) at RSU Royal Prima Medan

From the results of research on the influence of service quality on user satisfaction of the hospital management information system (SIMRS) at RSU Royal Prima Medan the results obtained from the cross table show that if the quality of the SIMRS service is good then there are 128 users who feel satisfied with a percentage of 76.2% and the users who feel dissatisfied are 23 users with a percentage of 13.7%, and if the quality of the SIMRS service is not Well, there are 8 users who feel satisfied with a percentage of 4.8% and 9 users who feel dissatisfied with a percentage of 5.4%.

Test results *chi square* value results are obtained *p-value* of $0.001 < 0.05$ which means there is influence of service quality on user satisfaction of the hospital management information system (SIMRS) at RSU Royal Prima Medan. This shows that the higher the service quality, the more satisfied system users are, conversely, the lower the service quality, the less satisfied system users are.

Service quality which influences system user satisfaction is due to good service quality from the provider, resulting in system user satisfaction. Users are satisfied because the service provider responds immediately when needed, provides quality and service guarantees related to system users, and is able to resolve difficulties that may occur when using the system.

The Influence of Organizational Structure on User Satisfaction of the Hospital Management Information System (SIMRS) at RSU Royal Prima Medan

From the results about the influence of organizational structure on user satisfaction of the hospital management information system (SIMRS) at RSU Royal Prima Medan it is obtained from the results of the cross table that if the organizational structure is good then there are 125 users who feel satisfied with a percentage of 74.4% and there are 8 users who feel dissatisfied with a percentage of 4.8%, and if the organizational structure is not good then 11 users were satisfied with a percentage of 6.5% and 24 users were dissatisfied with a percentage of 14.3%.

Test results *chi square* value results are obtained *p-value* of $0.000 < 0.05$ which means there is influence of organizational structure on user satisfaction of the hospital management information system (SIMRS) at RSU Royal Prima Medan. The results of this research are in line with research by Adila and Dahtiah (2020) which states that organizational structure has a positive effect on user satisfaction. This is due to good planning from management for system implementation. Good planning, organizational support and relationships with the

organization are indicators of organizational structure. If the system implementation is planned well and supported by the organization, then the information system can be said to be good (Prasti, et al. 2018). The information system used by RSU Royal Prima Medan is categorized as good, because the implementation has been well planned in advance by the organization.

The Influence of Facility Conditions on User Satisfaction of the Hospital Management Information System (SIMRS) at RSU Royal Prima Medan

From the results of research on The influence of facility conditions on user satisfaction of the hospital management information system (SIMRS) at RSU Royal Prima Medan obtained from the results of the cross table that if the condition of the SIMRS facilities is good then there are 117 users who feel satisfied with a percentage of 69.6% and the users who feel dissatisfied are 13 users with a percentage of 7.7%, and if the condition of the SIMRS facilities is not Well, 19 users were satisfied with a percentage of 11.3% and 19 users were dissatisfied with a percentage of 11.3%.

Test results chi square value results are obtained p-value of $0.000 < 0.05$ which means there is influence condition of facilities on user satisfaction of the hospital management information system (SIMRS) at RSU Royal Prima Medan. The research results show conformity with research by Adila and Dahtiah (2020) which states that facility conditions have a positive effect on user satisfaction. This shows that the condition of the facilities supports system implementation and provides benefits and satisfaction for system users. The conditions of supporting facilities such as resources, facilities and infrastructure, network infrastructure, maintenance and technical support have fully helped use the system and provided benefits for users.

The Influence of Leadership Support on User Satisfaction of the Hospital Management Information System (SIMRS) at RSU Royal Prima Medan

From the results of research on the influence of leadership support on user satisfaction of the hospital management information system (SIMRS) at RSU Royal Prima Medan, the cross table results show that if leadership support in using SIMRS is good then 127 users are satisfied with a percentage of 75.6% and there are 9 users who feel dissatisfied with a percentage of 5.4%, and if the leadership support in using SIMRS is not good then there are 9 users who feel satisfied with a percentage of 5.4% and users who feel dissatisfied are as many as 23 users with a percentage of 13.7%.

The results of the chi square test showed a p-value of $0.000 < 0.05$, which means that there is an influence of leadership support on user satisfaction of the hospital management information system (SIMRS) at RSU Royal Prima Medan. The research results show conformity with research by Adila and Dahtiah (2020) which states that leadership support has a positive effect on system users. This is due to the support of leadership who can help facilitate the implementation and use of the system implemented by the organization.

CONCLUSION

Based on the evaluation results of the implementation of the TransMedic Hospital Management Information System (SIMRS) at Royal Prima Medan Hospital using the HOT-Fit method, the following conclusions can be drawn: The level of user satisfaction with the TransMedic SIMRS is quite high, especially in features that support administrative work such as patient registration and schedule management. User readiness in adopting new technology shows positive results, although some staff still need further training to maximize the use of the system. The implementation of SIMRS has had a significant impact on the operational efficiency of the hospital, especially in the management of medical records and coordination between units. Management support for the implementation of SIMRS appears good, but more mature planning is needed to ensure consistent system utilization in all hospital units. The performance of the TransMedic SIMRS technology is quite adequate in supporting the operational needs of the hospital. The system shows good data access speed, effective integration with other devices, and a guaranteed level of patient data security. Some technical challenges, such as downtime and limited system capacity, need to be addressed to improve the overall reliability of the system. The implementation of SIMRS has successfully improved the quality of patient services, accelerated administrative processes, and reduced staff workload. From an organizational perspective, the system has supported more efficient and accurate data-based decision making.

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