

# ANALYSIS THE EFFECT OF HUMAN, ORGANIZATION AND TECHNOLOGY ON SIMRS IMPLEMENTATION AT KONAWA SELATAN REGIONAL HOSPITAL

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## Abstract

**Background.** The performance of hospital information management systems (SIMRS) is crucial for operational efficiency and effectiveness in healthcare settings. At Konawa Selatan Regional Hospital, the implementation of SIMRS aims to improve service quality, productivity, and reduce operational costs. Despite its potential benefits, several factors influence the success of SIMRS, including human, organizational, and technological aspects. **Purpose.** This study aims to analyze the effect of human, organizational, and technological factors on the implementation and net benefits of SIMRS at Konawa Selatan Regional Hospital. **Method.** The research was conducted using the Human, Organization, Technology - Fit (HOT-Fit) method. A quantitative cross-sectional study was conducted using the HOT-FIT (Human, Organization, Technology-Fit) framework. Data were collected from 172 hospital employees through questionnaires, employing a Likert scale. Statistical analysis included univariate and multivariate analyses, particularly linear regression, to determine the influence of each factor on SIMRS implementation. **Results.** The results showed that the system quality variable had no effect on user satisfaction with a significance value of 0.300 ( $p > 0.05$ ). There is an influence of information quality variables on system usage with a significance value of 0.000 ( $p < 0.05$ ). There is no effect of service quality variables on system usage with a significance value of 0.188 ( $p > 0.05$ ). There is an influence of system quality, information quality and service quality variables on user satisfaction with a significance value of 0.012, 0.000, and 0.002 ( $p < 0.05$ ). There is an influence of service quality variables on the structure with a significant value of 0.000 ( $p < 0.05$ ). There is no influence between system usage on net benefits with a significant value of 0.138 ( $p > 0.05$ ). There is an influence of the user satisfaction variable on net benefits which is 0.000 ( $p < 0.05$ ). And there is an influence between structure on net benefits with a significant value of 0.001 ( $p < 0.05$ ). **Conclusion.** The research shows that system quality and service quality have no effect on system usage, while information quality has a positive effect on system usage. In addition, system quality, information quality, and service quality have a positive effect on user satisfaction. Service quality also has a positive effect on organizational structure. Although system usage has no effect on net benefits, user satisfaction and organizational structure have a positive effect on net benefits. It is expected to improve the quality of SIMRS technology services, including improving the speed of response and technical support. Periodic training programs for SIMRS users as well as continuous monitoring of system quality, service quality, and system usage are needed. In addition, it is necessary to ensure that the technology infrastructure used supports SIMRS operations optimally, including a stable network and adequate hardware.

**Keywords:** Hospital Hospital Information Management System (SIMRS), HOT-FIT Model.

## INTRODUCTION

Advances in information technology cause rapid changes, therefore Indonesian hospitals must be able to understand, handle, influence, and make decisions in real-time [1]. The quality of information processing and the development of information technology are critical to the success of healthcare institutions including hospitals.

Information systems support healthcare processes and operations, staff and management decision-making, and strategies to create competitive advantage in hospitals [2].

According to the World Health Organization (WHO), information systems provide information to support decision making at every level of the organization. Therefore, the important role of information technology in improving health services in hospitals is recognized by requiring the use of Hospital Information Systems based on the Minister of Health Regulation Number 1171/MENKES/PER/VI/2011 [3]. In addition, each hospital is also required to organize SIMRS according to the Minister of Health Regulation Number 82 of 2013 concerning Hospital Management Information Systems [4].

The application of information systems in hospital management allows the provision of fast information, so that hospitals can make the right decisions and reduce unnecessary costs to increase profits [5]. Hospital Management Information System (SIMRS) is designed to support health program management and planning [6]. With SIMRS, the information generated can be used to improve the effectiveness of health services and create a competitive advantage for hospitals [7].

The implementation of SIMRS supports the improvement of service quality, effectiveness, and work efficiency in hospitals, accelerating employee and hospital performance [7]. This management information system is an important factor in improving the quality of health services to meet public expectations for accuracy and speed of service. However, a 2022 survey showed that out of 2,595 hospitals in Indonesia, 12 percent or 304 hospitals have not implemented SIMRS [8]. Only 16 percent of the hospitals that have implemented SIMRS use electronic medical records with good indicators. One of the hospitals with constraints in SIMRS implementation is Konawe Selatan Regional Hospital.

Konawe Selatan Regional Hospital, a Regional Public Service Agency Hospital categorized as a Government Hospital, serves as a health center in Konawe Selatan Regency. Based on the organizational performance change action report at Konawe Selatan Regional Hospital in 2023, it faces several obstacles in optimizing health services, including: (i) The availability and completeness of health service facilities that are not yet optimal; (ii) Not yet able to maintain and improve achievements in the application of hospital accreditation standards; (iii) Health services that are not yet optimal; (iv) SIMRS applications are not yet optimal; and (v) Referral systems and hospital networks are not running optimally [9].

In the performance study of service quality using the APKL method, the SIMRS application that has not been optimized is the top priority issue with the highest score. Problems related to SIMRS include slow internet networks, applications that are not user-friendly, slow admin response, uneven use of SOPs, lack of motivation and management support [9].

One of the objectives of SIMRS is to improve efficiency, effectiveness, performance, professionalism, and access to hospital services [10]. However, an initial survey showed negative perceptions from respondents regarding SIMRS, including incomplete features, slow internet network, non-user-friendly applications, user difficulties in operations, many manual records, non-real-time data entry, and frequent application errors. Management support for SIMRS is not optimal in terms of funding and procurement of goods and computing networks. Training and mentoring by

vendors has not covered all units, only 12 out of 16 units. SIMRS Standard Operating Procedures (SOPs) are uneven, laboratories are not yet connected to the laboratory information system, pharmacy is not yet connected to digital prescribing, and casemix is not yet connected to Bridging Vclaim, so there are still many manual processes.

As a result of the non-optimal implementation of SIMRS, the performance of service quality in Konawe Selatan Regional Hospital is not optimal, affecting future planning and effective decision making [11]. Low net benefits hinder coordination, reporting, and administrative procedures to obtain fast, precise, and accurate information [5].

The Net Benefit of SIMRS provides significant benefits to users by processing and combining all hospital service processes into a network of coordination, reporting, and administrative procedures to ensure precise and accurate information [12]. This benefit is seen in the precision and accuracy of data entry and management, which minimizes human error and affects management decision making [13].

Good SIMRS performance is achieved if the system provides quality information for management decision making. However, factors such as people, organization, and technology affect the optimality of SIMRS [4]. Human factors involve data users, while organizational factors include SIMRS regulations and management, and technological factors involve the process of collecting, cleaning, managing data, and distributing health information. These three factors, known as the HOT-FIT (Human, Organization, Technology) model, influence the Net Benefit of SIMRS and hospital performance [9].

The various descriptions described previously show that the implementation of SIMRS has not been maximized and has not provided optimal benefits for hospitals and patient services. SIMRS must facilitate operations and overcome patient service constraints. Researchers used the HOT-FIT model to assess the Net Benefit of SIMRS through variables of system usage, user satisfaction, organizational structure, system quality, information quality, and service quality.

## **MATERIAL AND METHODS**

### **Methodology of the Study and Subjects**

This research is a quantitative study with a cross sectional design, this research is a correlation study by connecting two or more variables in the HOT-Fit theory. HOT Fit is one of the theoretical framework models used to evaluate information systems in the field of health services. The variables studied were human factors (system usage, user satisfaction), technology factors (system quality, information quality, and service quality), organizational factors (structure), and net benefits.

This research was conducted at Konawe Selatan Regional Hospital, in January - July 2024. The study population consisted of 294 hospital employees. Proportional random sampling was used to obtain a representative sample based on the type of work. The sample size of 172 employees was determined using the slovin formula. Researchers used a questionnaire in the data collection process, the questionnaire used a Likert scale format using a score range of 1-4, namely: "Strongly Disagree", 'Disagree', 'Agree', 'Strongly Agree'. Then, the statistical data was compiled and analyzed using statistical tools.

## Statistics Analysis

The results of the study will be presented in the form of univariate analysis and multivariate analysis. Univariate analysis is a statistical analysis to describe each respondent's characteristics and data distribution of each research variable. Multivariate analysis is an analysis used on several independent variables on the dependent variable. The analysis used to see the effect of each variable on the Hot-Fit method is linear regression analysis. To determine the effect of each independent and dependent variable, a linear regression test was carried out with a value of  $\alpha = 0.05$  with the provisions of  $p \text{ value} \geq 0.05$  means that there is no effect of the independent variable on the dependent variable, with  $p \text{ value} < 0.05$  means that there is an effect of the independent variable on the dependent variable.

## RESULTS

### Univariate Analysis

**Table 1: Frequency Distribution of Respondent's Characteristics at Konawe Selatan Regional Hospital**

No	Respondent Characteristics	n	%	Total
1	<b>Age (Years)</b>			
	21-30	80	46,5	172
	31-40	73	42,4	
	41-50	18	10,5	
	> 50	1	0,6	
2	<b>Gender</b>			
	Male	47	27,3	172
	Female	125	72,7	
3	<b>Education Level</b>			
	Associate's Degree	64	37,2	172
	Bachelor Degree	88	51,2	
	Magister Degree	10	5,8	
Professional Degree	10	5,8		
4	<b>Number of Working Hours</b>			
	< 20 hours a week	16	9,3	172
	20 – 39 hours a week	65	37,83	
$\geq$ 40 hours a week	91	52,9		
5	<b>Length of Work in Hospital</b>			
	1-5 years	94	54,7	172
	6-10 years	49	28,5	
	11-15 years	23	13,4	
$\geq$ 15 years	6	3,5		
6	<b>Employee Status</b>			
	Civil Servant	61	35,5	172
	Non Civil Servant	110	64	

Source: Primary Data

Based on table 1 above, it is known that the characteristics of respondents based on age are mostly in the age group 21-30 years, namely 80 respondents (46.5%). The characteristics of respondents based on gender are mostly female respondents, namely 125 respondents (72.7%). The characteristics of respondents based on the level of education are mostly respondents with the last education D4 / S1 / equivalent, namely 88 respondents (51.2%). The characteristics of respondents based on the number of working hours were mostly respondents with working hours  $\geq$  40 hours a

week, namely 91 respondents (52.9%). Based on the length of service in the hospital, the most respondents were respondents with a tenure of 1-5 years, namely 94 respondents (54.7%). Characteristics of respondents based on employment status, the most respondents were respondents who were civil servants, namely 110 people (64%).

**Table 2: Frequency Distribution of Research Variables at Konawe Selatan Regional Hospital**

No	Research Variabels	n	%	Total
1	<b>System Use</b>			
	Good	154	89,5	172
	Less Good	18	10,5	
2	<b>User Satisfaction</b>			
	Good	159	92,4	172
	Less Good	13	7,6	
3	<b>Structure</b>			
	Good	166	96,5	172
	Less Good	6	3,5	
4	<b>System Quality</b>			
	Good	156	90,7	172
	Less Good	16	9,3	
5	<b>Information Quality</b>			
	Good	159	92,4	172
	Less Good	13	7,6	
6	<b>Service Quality</b>			
	Good	162	94,2	172
	Less Good	10	5,8	
7	<b>Net Benefit</b>			
	Good	166	96,4	172
	Less Good	6	3,5	

Source: Primary Data

Based on table 2 above, it is known that the variables with the highest good category are structure variables (96.5%), net benefit variables (96.4%), and service quality variables (94.2%). While the highest unfavorable category is found in the system use variable (10.5%) and system quality (9.3%).

**Table 3: Variable Relationship Research at Konawe Selatan Regional Hospital**

No	Variable	Estimate	S.E	P	Interpretation
1	System Quality → System Use	0,107	0,103	0,300	<b>Not Significant</b>
2	Information Quality → System Use	0,554	0,145	0,000	Significant
3	Service Quality → System Use	0,198	0,150	0,188	<b>Not Significant</b>
4	System Quality → User Satisfaction	0,202	0,080	0,012	Significant
5	Information Quality → User Satisfaction	0,851	0,111	0,000	Significant
6	Service Quality → User Satisfaction	0,367	0,115	0,002	Significant
7	Service Quality → Structure	0,600	0,039	0,000	Significant
8	System Use → Net Benefit	0,070	0,047	0,138	<b>Not Significant</b>
9	User Satisfaction → Net Benefit	0,340	0,053	0,000	Significant
10	Structure → Net Benefit	0,221	0,062	0,001	Significant

Source: Primary Data

Based on table 3 above, it is known that there is no effect of system quality on system use with a significance value of 0.300 ( $p > 0.05$ ). There is an effect of information quality on system use with a significance value of 0.000 ( $p < 0.05$ ). There is no effect of service

quality on system use with a significance value of 0.188 ( $p > 0.05$ ). There is an effect of system quality on user satisfaction with a significance value of 0.012 ( $p < 0.05$ ). There is an effect of information quality on user satisfaction with a significance value of 0.000 ( $p < 0.05$ ). There is an effect of service quality on user satisfaction with a significance value of 0.002 ( $p < 0.05$ ). There is an effect of service quality on structure with a significance value of 0.000 ( $p < 0.05$ ). There is no effect of system use on net benefits with a significance value of 0.138 ( $p > 0.05$ ). There is an influence of user satisfaction on the use of net benefits with a significance value of 0.000 ( $p < 0.05$ ). There is an influence of structure on net benefits with a significance value of 0.001 ( $p < 0.05$ ).

## DISCUSSION

### **The Effect of System Quality on System Users in Konawe Selatan Regional Hospital**

The quality of the hospital management information system (SIMRS) is an important factor influencing the level of use of the system by users at the Konawe Selatan Regional Hospital. The big picture of respondents' answers regarding the system quality variable shows that the level of quality of the SIMRS technology system is in the good category, namely (90.7%). This means that Hospital employees feel that the quality of the system is good with a system that has accurate data, has a simple and lightweight appearance, can be learned easily and is easily accessible wherever they are. Most of the respondents' answers regarding the system usage variable showed in the good category (89.5%). The good category in system usage lies in good usage behavior that affects the smooth running of the system, the provision of training on the system and the system used in accordance with the respondent's work.

Based on the results of research conducted on employees at Konawe Selatan Regional Hospital, the p-value is 0.300  $< 0.005$ , which means that there is no effect of system quality on system usage. This suggests that although system quality is rated well by users, other factors may be more dominant in influencing the level of system use, such as organizational policies, satisfaction, or technical support. Therefore, this study highlights the importance of considering various aspects in improving the use of SIMRS, not just focusing on system quality alone.

This research is not in line with research by Indrayati, (2021) conducted on 145 employees at Beriman Balikpapan Hospital in the application of SIMRS [14]. shows the results of research with a significance value of 0.000  $< 0.05$ , which indicates that there is an influence of system quality on system usage. Ode M & Kusnan, (2021) conducted a similar study at Bahteramas Hospital with 162 respondents, the results of the study state that the effect of system quality on system usage is accepted, because it shows that the good quality of the SIMRS system at Bahteramas Hospital such as a system with accurate data, simple and easy to learn, functions and features that support work, efficiency and has a fast response time in accessing data will increase system usage [15]. These results are also not in accordance with several previous studies by Prima Atthiya (2019) with the results of research where system quality has the most influence on system usage [16].

Although the results of this study indicate that system quality does not have a significant influence on system usage in Konawe Selatan Regional Hospital, it is important to consider that other factors may be more dominant in influencing the level of system usage. This research highlights the need for a more holistic approach in

improving SIMRS usage, not just by improving system quality, but also by ensuring adequate support and supportive policies. Thus, hospitals can achieve higher operational efficiency and provide better health services to patients.

### **The Effect of System Quality on User Satisfaction in Konawe Selatan Regional Hospital**

In today's digital era, the quality of hospital management information systems (SIMRS) is a critical factor in improving the efficiency and effectiveness of health services. Konawe Selatan Regional Hospital has adopted SIMRS in the hope of providing better service to patients and increasing user satisfaction. The results showed that the quality of SIMRS in Konawe Selatan Regional Hospital was rated as good (90.7%), with accurate data, simple display, and easy access. User satisfaction was also high (92.4%), indicating that users felt the benefits of the system. This study found a significant positive effect between system quality and user satisfaction ( $p$ -value  $0.012 < 0.05$ ), with an estimated effect of 0.202 and a low standard error (0.080), indicating a stable estimate.

This research is in accordance with research conducted by Indrayati, (2021) which shows the results of research with a significance value of  $0.000 < 0.05$ , which indicates that there is an effect of system quality on user satisfaction [14]. Ode M & Kusnan, (2021) conducted research, the results of the study stated that the effect of system quality on user satisfaction was accepted, because this shows that the quality of the SIMRS system at Bahteramas Hospital is good where users very easily learn with a simple system display and respondents' perceptions that this system makes work easier, thus making system users will feel satisfaction [15].

These results also show the suitability of research by Sibuea et al., (2018) which states that system quality has a significant effect on user satisfaction where technology in this case is system quality [17]. The results of this study are also in line with previous researchers who suggested that the suitability of system quality has an influence on the level of user satisfaction [18,19].

This study emphasizes the importance of system quality in improving SIMRS user satisfaction in Konawe Selatan Regional Hospital, supporting the view that improving system quality can increase operational efficiency and user satisfaction.

### **The Effect of Information Quality on System Usage in Konawe Selatan Regional Hospital**

The quality of information produced by SIMRS plays an important role in the successful implementation of technology in the health sector. In Konawe Selatan Blood Hospital, the quality of information from SIMRS can affect the level of usage by medical personnel and administrative staff. Information that is accurate, complete, relevant, and easily accessible increases user trust and satisfaction, encouraging them to more actively use the system.

The results showed that the quality of SIMRS information in Konawe Selatan Regional Hospital was rated as good (92.4%), with accurate, relevant, useful, and reliable information. User satisfaction is also high (89.5%), with good usage behavior, adequate training, and system suitability to work. The results also show that information quality has a significant effect on system usage ( $p$ -value  $0.000 < 0.05$ ) with a positive influence (estimate value 0.554). Although the effect is smaller than system quality, it is still significant and important in increasing system usage.

This research is in accordance with research conducted by Indrayati, (2021) which shows that there is an effect of information quality on system usage [14]. However, in contrast to research conducted by Ode M & Kusnan, (2021) conducted similar research, showing that there is no effect of information quality on the use of SIMRS at Bahteramas Hospital, where the research is in line with research conducted by Sibuea et al., (2018) that information quality has no significant effect on system usage, indicating the respondent's perception that the benefits of using the system obtained are not in accordance with user expectations and expectations [15,17].

Nurlani, L., Permana (2017) states that the quality of information from the results of existing systems has a significant effect on the use of these information systems [20]. The results of this study are also in line with previous researchers who suggested that the suitability of information quality has an influence on system usage [18,21].

Information quality is assessed by the accuracy and relevance of the data. Accurate information is free from errors and biases, while relevance indicates benefits to users. Good information quality can attract more users to use the system [22].

### **The Effect of Information Quality on User Satisfaction in Konawe Selatan Regional Hospital**

Information quality is an important factor in hospital management information systems (SIMRS), including relevance, readability, conciseness, conciseness, informativeness, and importance of information [23]. In Konawe Selatan Regional Hospital, the quality of SIMRS information is critical to support operations and decision-making. Information that is accurate, complete, relevant, and timely increases user satisfaction, both medical personnel and administrative staff.

The results showed that SIMRS information quality was rated as good (92.4%), with accurate, relevant, and reliable information. User satisfaction was also high (92.4%), indicating that users felt the benefits of the system. This study found that information quality has a significant effect on user satisfaction (p-value 0.000), with a positive influence (estimate 0.851).

This research is consistent with Indrayati's research (2021) at Beriman Balikpapan Hospital, with the direction of this positive influence indicating that the better the quality of information, the better the user satisfaction [14]. However, it is contrary to the research of Ode M & Kusnan (2021) at Bahteramas Hospital, which found that information quality does not have a significant effect on user satisfaction, because the respondents think that the quality of information produced by SIMRS is not good enough and complete, this is the impact of the perception that the use of SIMRS has not become a required routine so that some of the system users finally choose to create data and information manually [15]. Several other studies support the finding that information quality affects user satisfaction [18,24]

Good information quality can increase information system user satisfaction [25]. Yusof & Arifin (2008) state that information quality is the most influential factor on user satisfaction ; the higher the quality of information, the more satisfied information system users [26].



## **The Effect of Service Quality on System Usage in Konawe Selatan Regional Hospital**

The quality of SIMRS services greatly influences the use of the system in Konawe Selatan Regional Hospital. Service quality includes speed of response, reliability of technical support, and the ability of the system to meet user needs. Fast and reliable services increase user trust and satisfaction.

The results showed that the quality of SIMRS services at Konawe Selatan Regional Hospital was rated as good (94.2%), with accurate and relevant information. User satisfaction was also high (89.5%), indicating that users felt the benefits of the system. However, the study showed that service quality had no significant effect on system usage (p-value 0.188). Other factors such as organizational policies, resource availability, or comfort level with technology may be more dominant.

This research contradicts the research of Indrayati (2021) and Ode M & Kusnan (2021) who found that service quality affects the use of SIMRS. This research emphasizes the importance of a comprehensive approach in improving SIMRS adoption, including continuous training, responsive technical support, and policies that encourage the use of technology [14,15].

This finding shows that although the quality of service provided by SIMRS at Konawe Selatan Regional Hospital is considered good by most employees, it does not significantly increase the level of system usage. This finding indicates that there are other more dominant factors that may influence system usage, such as organizational policies, resource availability, or comfort level with technology. Although this result differs from previous studies that showed a positive influence of service quality on system usage, it emphasizes the importance of a more comprehensive approach in improving SIMRS adoption and usage. Hospitals need to consider various aspects, including continuous training, more responsive technical support, and policies that encourage the use of technology.

## **The Effect of Service Quality on User Satisfaction in Konawe Selatan Regional Hospital**

The quality of service provided by SIMRS plays an important role in determining the level of user satisfaction at Konawe Selatan Regional Hospital. Aspects of service quality include speed of response, system reliability, and effectiveness of technical support. Good service not only ensures the system functions properly but also makes users feel valued and supported.

The results showed that the quality of SIMRS services at Konawe Selatan Regional Hospital was rated as good (94.2%), and user satisfaction was also high (92.4%). This study aims to see the effect of service quality on user satisfaction. The results show that there is a significant effect (p-value 0.002), meaning that the better the service quality, the higher the user satisfaction. That is, the better and more accurate the services provided by the hospital management information system (SIMRS), the higher the level of user satisfaction. Effective services include quick response to user needs, reliability in presenting information, and adequate technical support. When users feel that the services they receive ease their work and provide the necessary information in a timely and accurate manner, they tend to feel more satisfied. Therefore, improving service quality in SIMRS is an important step in improving user satisfaction at Konawe Selatan Regional Hospital.

This research is consistent with the research of Indrayati (2021) at Beriman Balikpapan Hospital and Ode M & Kusnan (2021) at Bahteramas Hospital, who also found a positive effect of service quality on user satisfaction [14,15]. Effective services include quick response, information reliability, and adequate technical support, all of which increase user satisfaction.

Previous research also supports these findings, such as Yulianto et al. (2021) and Febrita et al. (2021), which show that service quality has a significant effect on user satisfaction [27,28]. Yessy et al. (2016) also stated that the higher the quality of service, the higher the user satisfaction [29].

Overall, improving the quality of SIMRS services is an important step to increase user satisfaction at Konawe Selatan Regional Hospital, showing that good service makes users more satisfied and tends to be more active in using the system.

### **The Effect of Service Quality on Structure in Konawe Selatan Regional Hospital**

SIMRS service quality at Konawe Selatan Regional Hospital plays an important role in determining the level of user satisfaction and operational efficiency of the hospital. This service quality is assessed by the speed of response, system reliability, and effectiveness of technical support. Superior service helps users overcome technical problems quickly, improving the efficiency and effectiveness of hospital operations.

The results showed that SIMRS service quality was rated as good (94.2%), with adequate technical support. User satisfaction was also good (96.5%), with the system supporting staff cooperation and organizational strategy. This study aims to see the effect of service quality on organizational structure in Konawe Selatan Regional Hospital. The results showed there was a significant effect (p-value 0.000), meaning that good and reliable service quality contributed positively to the efficiency and effectiveness of the hospital's organizational structure.

In other words, good service quality of SIMRS contributes positively to the efficiency and effectiveness of the organizational structure in the hospital. When the system functions well, technical support is fast and effective, and technical issues can be resolved promptly, hospital staff can work more efficiently and focus on their main tasks. Good service support not only improves individual performance, but also strengthens the overall structure by ensuring that all system components work harmoniously and support the hospital's operational and strategic goals. Thus, improving the quality of technology services in SIMRS can be considered a key factor in improving the efficiency and effectiveness of the organizational structure at Konawe Selatan Regional Hospital.

This research is in line with the research of Indrayati (2021) and Ode M & Kusnan (2021) which shows the positive effect of service quality on organizational structure. Fast and effective technical support allows staff to focus on their main tasks, strengthens the organizational structure, and supports the hospital's operational and strategic goals [14,15]. This is also in line with previous research by Sibuea et al., (2018) with research results, namely service quality has a significant effect on organizational structure from the human aspect [17].

Overall, improving the quality of SIMRS services is a key factor in improving the efficiency and effectiveness of the organizational structure at the Konawe Selatan Regional Hospital.

## **The Effect of System Users on Net Benefit in Konawe Selatan Regional Hospital**

SIMRS users at Konawe Selatan Regional Hospital play a key role in its successful implementation. Trained users can maximize the benefits of the system. The results showed the use of SIMRS was rated as good (89.5%), with adequate training and a system that suits the job. The net benefit of SIMRS is also considered good (96.5%), helping work, increasing productivity, reducing workload and costs. This study aims to see the effect of system usage on net benefits in Konawe Selatan REGIONAL HOSPITAL. The results showed no significant effect (p-value 0.138). This means that although the use of the system is good, this does not directly affect the net benefits of the system. Users feel their work is not too dependent on SIMRS. This study highlights the importance of other factors that may affect net benefits. Although good system usage is an important element, these results show that the overall success of SIMRS also depends on various other aspects that support the efficiency and effectiveness of hospital operations.

This research is in line with the research of Amelia Nuryadin et al. (2021) at Pelamonia Makassar Hospital and research at Tora Belo Hospital which showed that system usage did not have a significant effect on net benefits [30]. However, this result contradicts Indrayati's research (2021) at RSUD Beriman Balikpapan which shows a positive effect of system usage on net benefits [14].

This research is also in line with research conducted by Ode M & Kusnan, (2021) conducted a similar study at Bahteramas Hospital, the results showed that the use of the system on net benefits did not have a significant effect [15]. this is in accordance with previous research (Saliha, 2018) with the results that the test results show that there are 4 hypotheses that are rejected, one of which is system use because there is no good and thorough system interaction such as a user friendly system for users which results in the system not being able to understand and feel the benefits as a whole [31]. but contrary to research (Mudiono, 2018) which states that human factors including computer skills, understanding the usefulness and ease of use of hospital information systems are more effective in the acceptance and successful implementation of hospital information systems [4].

Although the results show that there is no significant influence between system usage and net benefits. This finding emphasizes the importance of other factors in determining the success of SIMRS, such as service quality, technical support, and system interaction. Hospitals need a holistic approach to SIMRS implementation, ensuring all supporting elements work synergistically to improve operational efficiency and effectiveness. Continuous evaluation and improvement are needed to maximize the benefits of information technology in the health sector.

## **The Effect of User Satisfaction on Net Benefit in Konawe Selatan Regional Hospital**

User satisfaction is an important indicator in assessing the success of SIMRS in Konawe Selatan Regional Hospital. This satisfaction reflects how well the system meets the expectations and needs of medical and administrative staff, influenced by service quality, system reliability, and ease of use. The results showed that SIMRS user satisfaction in Konawe Selatan Regional Hospital was in the good category (92.4%), and net benefits were also rated as good (96.5%), indicating that SIMRS helps productivity, reduces workload, and increases efficiency. This study aims to see the effect of user satisfaction on net benefits. The results show that user satisfaction

has a significant effect on net benefits (p-value 0.000), meaning that the higher the user satisfaction, the greater the benefits obtained from the system.

High user satisfaction encourages optimal use of the system, improving the efficiency and effectiveness of hospital operations. High user satisfaction can also increase compliance with system usage, reduce time spent on administrative work, and allow medical personnel to focus on more important clinical tasks. This research is in accordance with Indrayati's (2021) research at RSUD Beriman Balikpapan, which shows a positive effect of user satisfaction on net benefits [14]. However, research by Ode M & Kusnan (2021) at Bahteramas Hospital found that organizational structure has no effect on net benefits [15].

This research is also not in accordance with several previous studies (Prima. A,S 2019) with the results saying that organizational structure has no effect on net benefits [16], Sibuea et al., (2018) the results of his research say that net benefits are not influenced by organizational structure if they have a bad assessment so that additional training for SIMRS users, policies regarding assistance with use facilities and network repairs are needed to reduce the number of errors during peak hours and increase system user satisfaction [17].

Overall, these results emphasize the importance of user satisfaction in maximizing the benefits of SIMRS, as well as the need for a holistic approach that includes training, technical support, and policies that support the effective use of technology.

### **Effect of Structure on Net Benefit in Konawe Selatan Regional Hospital**

The organizational structure at Konawe Selatan Regional Hospital plays an important role in supporting the implementation of SIMRS. A good structure includes clear roles and responsibilities, efficient workflow, and coordination between departments. An effective structure can maximize the net benefits of using SIMRS.

The results showed that the organizational structure is considered good (96.5%), supported by human resources who work together in its application, the use of SIMRS can make employees make strategic organizations better, the system can store and manage employee knowledge so that the company continues to run well in any situation. And net benefits are also considered good, namely (96.5%), located in the application of SIMRS which can help do the daily work of employees, the system can increase work productivity, the system can reduce workload, the system can help achieve goals effectively, the system helps reduce the error rate in doing work, the system can reduce spending costs to be more efficient. The results showed that there was a significant effect (p-value 0.001), meaning that a good structure increased the benefits of SIMRS. A strong structure allows SIMRS to be used optimally by all users, increasing productivity and supporting the achievement of hospital goals.

This research is in line with Indrayati's research (2021) at Beriman Balikpapan Hospital which shows a positive influence of structure on net benefits [14]. Abda'u et al.'s research (2018) also shows that there is a unidirectional (positive) relationship between user satisfaction and net benefits [32]. According to Prasetyowati, A., Kushartanti (2018), satisfaction is the response and feedback generated by users after using information systems [33]. However, research by Ode M & Kusnan (2021) at Bahteramas Hospital found that user satisfaction with net benefits was not accepted due to differences in respondent characteristics and lack of perceived benefits from SIMRS [15].

Overall, these results show that a good organizational structure plays an important role in supporting the benefits of SIMRS, and improving the organizational structure at Konawe Selatan Regional Hospital can improve the quality of health services.

## CONCLUSION

Factors affecting the implementation of SIMRS at Konawe Selatan Regional Hospital are system users, user satisfaction, system quality, information quality, service quality, structure, and net benefits. System quality and service quality have no effect on system users, while information quality has a positive effect on system usage. In addition, system quality, information quality, and service quality have a positive effect on user satisfaction. There is a positive influence between service quality on structure. And for system usage has no effect on net benefits, while user satisfaction and structure have a positive effect on net benefits. This study recommends Konawe Selatan Regional Hospital to focus on improving the quality of SIMRS technology services, including better response speed and technical support, to ensure users feel supported in using the system. Conducting regular training programs for SIMRS users, it is necessary to carry out continuous monitoring and evaluation of system quality, service quality, and system usage. The results of this evaluation can be used as a basis for making necessary improvements. In addition, the hospital needs to ensure that the technology infrastructure used supports SIMRS operations optimally, including a stable network and adequate hardware. With these recommendations, it is expected to improve the use and benefits of SIMRS at Konawe Selatan Regional Hospital to be more optimal.

## LIMITATIONS OF THE STUDY

Not all variables in the HOT-Fit component were included in the measurement, namely the system development and organizational environment variables, and the test did not use an alternating direction model. This may affect the validity of the analysis conclusions.

The understanding is different for each respondent because the researcher did not explain in detail to all respondents about the meaning of the contents of the statements in the questionnaire.

### Conflict of Interest

There are no known conflicts of interest associated with this publication.

### Authorship Contributions

The authors contributed to the conception, design, data collection, interpretation, analysis, and drafting of this research paper.

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