Comparative Analysis of TAM and HOT-Fit Methods in Evaluating SIMRS Implementation at Bhayangkara Hospital Medan

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ABSTRACT

Background: Hospital Information System (SIMRS) is a system that includes data collection, data processing, information presentation, data analysis, and information inference needed to support various operational activities in the hospital.

Methods: The research used involved two approaches: outer model and inner model. The outer model was used to test validity and reliability with AVE, discriminant validity, Cronbach alpha, and composite reliabilities. The inner model was tested using R Square and hypothesis testing.

Results: The results of research based on the HOT-Fit method show that Human factors have a significant relationship to Benefits, Organization, and Technology. In addition, organizational factors also have a significant relationship with benefits and technology. Statistical tests show that Human -> Benefits, Human -> Organization, Human -> Technology, Organization -> Benefits, and Organization -> Technology (p-value = 0.000). Meanwhile, based on the TAM method, it shows that the usefulness factor has a significant relationship to Actual Use, Behavioral Interest, and Attitude. In addition, the Ease factor also has a significant relationship to Usability and Attitude. The Behavioral Interest factor has a significant relationship to Actual Use, and the Attitude factor has a significant relationship to Behavioral Interest. Statistical tests show Usability -> Actual Use, Usability -> Behavioral Interest, Usability -> Attitude, Convenience -> Usability, Convenience -> Attitude, Behavioral Interest -> Actual Use, and Attitude -> Behavioral Interest (p-value = 0.000).

Conclusion: The results of this study indicate that human and organizational factors have a significant effect on technology. In addition, Human factors affect Organization and Benefits, while Organization affects Benefits. Furthermore, usefulness affects attitude, usefulness,

interest, and actual use, while convenience affects attitude and usefulness. Attitude affects Interest, and Interest affects Actual Use.

Keyword : SIMRS, Hospital, Evaluation, HOT-Fit, TAM

INTRODUCTION

SIMRS (Hospital Management Information System) integrates hospital information flows, managing patient data, finances, staffing, and more. A 2022 survey shows 68% of hospitals are in the early stages of SIMRS adoption, aiming to improve efficiency and accuracy in healthcare. The Indonesian Ministry of Health supports SIMRS development with policies to enhance decision-making and streamline operations. Research indicates that while SIMRS is useful and user-friendly, system components need improvement, along with user training. Studies at Mas Kadiran Medan Hospital aim to assess SIMRS acceptance using TAM and HOT-Fit methods for better technology adoption. SIMRS supports hospital functions like patient administration and inventory, with medical records being key for efficient service. Effective HR management is also crucial for hospital performance. Evaluation models like TAM and HOT-Fit focus on technology adoption and aligning systems with human, organizational, and technological needs. Combining these methods provides a holistic approach to system implementation.

LITERATURE REVIEW

The Hospital Management Information System (SIMRS) integrates hospital information, including electronic medical records, lab data, radiology, pharmaceuticals, and nursing. It manages patient data and hospital operations such as finances, staffing, and strategic planning. A 2022 survey shows 68% of hospitals are in the early stages of SIMRS implementation, aimed at improving healthcare efficiency and accuracy. (Kurnia Putri & Devi Fitriani, 2022)

The Technology Acceptance Model (TAM) is a framework developed by Fred Davis in 1986 to understand the acceptance and adoption of technology, especially management information systems and software by users. This model identifies the factors that influence the acceptance of the technology and is the basis for much research in this field. TAM focuses on perceived usefulness and perceived ease of use. The model also considers attitudes toward use, interest

in usage behavior, and actual use as stages in the technology adoption process. (Wicaksono, 2022)

The HOT-Fit (Human, Organization, and Technology Fit) method is an evaluation framework that analyzes the interaction between humans, organizations, and technology within information systems. Its goal is to assess the alignment of these three components to measure the success and effectiveness of the information system. The HOT-Fit approach examines the mutual influence among people, organizations, and technology during information system implementation, providing a comprehensive understanding of how these elements integrate and balance in the organizational environment.(Tawar et al., 2022)

The combination of the HOT-Fit and TAM methods allows for a holistic understanding of the implementation of information systems. HOT-Fit emphasizes the balance between people, organizations, and technology, while TAM focuses on technology adoption based on the perception of usability and ease of use. The integration of these two methods extends the evaluation to the technical, organizational, psychological, and behavioral aspects of the user to support the successful implementation of the information system.

METHODS

This study uses a quantitative approach to assess the success of SIMRS at Bhayangkara Hospital TK II Mas Kadiran Medan and test hypotheses related to the factors that affect it, by applying quantitative methods and techniques according to research procedures.

In this thesis, the researcher uses the HOT-Fit model which consists of four variables: Human, Organization, Technology, and Net Benefit. In addition, the researcher also used a modified model from the Technology Acceptance Model (TAM) which includes variables of Perception of Ease of Use, Perception of Usability, Attitude Towards Use, Interest in Usage Behavior, and Actual Use. This model includes key elements to understand the acceptance and use of information technology in this study.

The sampling technique used in this study is non-probability sampling with a type of total sampling, which is to sample as much as the total population, namely 220 employees. This study has previously been tested on 30 patients of the Olak Kemang Health Center (not involved in data collection) and has been declared valid and reliable.

This research has been declared ethically feasible by the Health Research Ethics Committee of Prima Indonesia University through the Certificate of Ethics Number The data analysis in

this study was carried out univariate to determine the frequency distribution of respondents and bivariate analysis with the Wilcoxon test to find out the difference in knowledge level between before and after reading the GEMAS Pocket Book.

RESULTS

Characteristics Responden

Table 1. Sociodemographic Characteristics of Research Respondents

Variable	Frequency	Persentase (%)
Age		
<30 years	74	33.1
30-40 years old	95	43.2
>40 years	52	23.7
Gender		
Male	56	25.4
Female	164	74.6
Education		
SMA	8	3.7
D3	94	42.7
Sarjana	118	53.6
Total	220	100,0

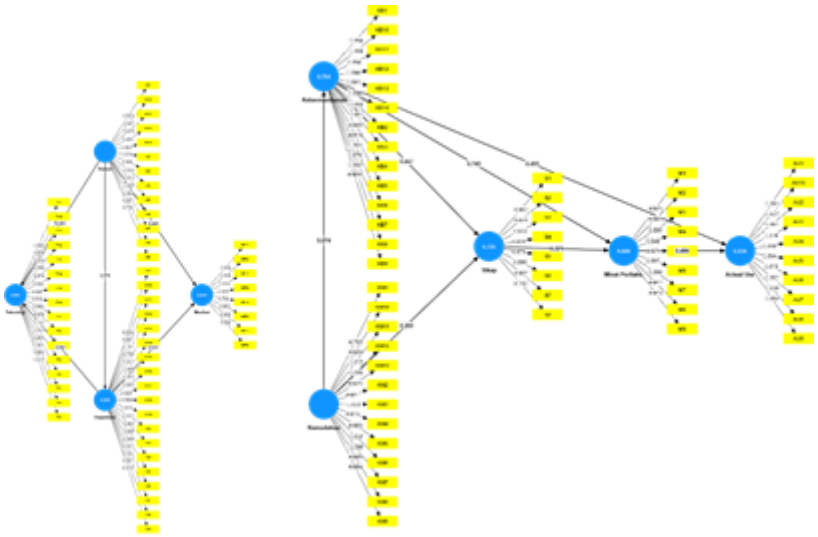
Based on the demographic data, most of the 220 respondents are in the 30-40 age range, totaling 95 people or 43.2% of all respondents. The under-30 age group comprises 33.1% (74 people), while respondents over 40 comprise 23.7% (52). Regarding gender, women dominate, with 164 respondents (74.6%), while men account for only 25.4% (56 people). Regarding educational background, most respondents hold a Bachelor's degree (53.6% or 118 people), followed by 94 people with a diploma (42.7%) and only 8 people with a high school education (3.7%). Overall, the largest group of respondents comprises women aged 30-40 with a bachelor's degree.

A. Metode HOT-Fit and TAM

1. Outer Model Metode HOT-Fit and TAM

a. Model Structural

Figure Structural Model



b. Validity Test.

i. Convergent Validity

The corvengent validity value is the value of loading factors on latent variables with their indicators. The standard used for corvengent validity is > 0.7 for the outer loading value and > 0.5 for the AVE value.

Table 2. Average Variance Extracted (AVE)

HOT-Fit	TAM
0.794	0.777
0.773	0.783
0.731	0.708
0.771	0.770
	0.749

The table above shows the outer loading test value of > 0.7 and the AVE value > 0.5, respectively.

ii. Descriminan Validity

Descriminant validity is a test that functions to measure the accuracy of the reflective model, which is carried out by comparing the roots of each quadrant at AVE to the correlation values

between constructs. If the square root value of AVE is higher than the correlation value between constructs or > 0.5, then it is declared to meet the criteria of descriminant validity. The outer results of the descriminant validity in this study can be seen through the following table:

Table 3. Descriminan Validity

	Human	Benefit	Organization	Technology
Human	0.891			
Benefit	0.966	0.879		
Organization	0.979	0.967	0.855	
Technology	0.976	0.961	0.980	0.878

	Actual Use	Manfaat	Kemudahan	Minat Perilaku	Sikap
Actual Use	0.882				
Manfaat	0.953	0.885			
Kemudahan	0.861	0.874	0.841		
Minat Perilaku	0.953	0.935	0.859	0.878	
Sikap	0.826	0.842	0.799	0.852	0.865

Based on the table above, it can be seen that the square root values of AVE HOT-Fit (0.891, 0.879, 0.855, 0.878) and AVE TAM (0.882, 0.885, 0.841, 0.878, 0.865) are greater than each construct or > 0.5. Therefore, it can be concluded that the measurement model is declared valid because it meets the descriminant validity standard.

Reliability Test

- Cronbach's Alpha

Table Cronbach's Alpha

HOT-Fit	TAM
0.978	0.978
0.957	0.957
0.979	0.979
0.980	0.980

From the above Cronbach's alpha value, it shows that the data in this study has been reliably reviewed from

- Table Composite Reliabilitas

Table Composite Reliabilitas

HOT-Fit	TAM
0.979	0.979
0.961	0.961
0.981	0.981
0.981	0.981

The composite reliability value above can show that the data in this study has a > value of 0.8 in each construct and it can be concluded that the data in this study has been reliably reviewed from composite reliability.

2. Inner Model

a. R Square

Table 4. R-Square

	R-square adjusted
Benefit	0.943
Human	0.959
Organization	0.959
Technology	0.966
Actual Use	0.939
Net Benefit	0.763
Behavioral Interests	0.888
Attitude	0.722

Based on the table, the R^2 value for the Benefit variable is 0.943, meaning 94.3% of its variance is explained by independent variables, while other factors influence 5.7%. The Organization variable has an R^2 value of 0.959, indicating that 95.9% of its variance is explained by independent variables, with 4.1% attributed to other factors. For the Technology variable, the R^2 value is 0.966, showing that independent variables explain 96.6% of its variance, while other factors explain 3.4%. Meanwhile, the R^2 value for the new benefit variable is 0.763, indicating that the independent variable explains 76.3% of its variance,

while 23.7% is attributed to other factors. For the attitude variable, the R^2 value is 0.722, meaning the independent variable explains 72.2% of its variance, leaving 27.8% to other factors. The interesting variable has an R^2 value of 0.888, showing that the independent variable explains 88.8% of its variance, with 11.2% from other factors. Finally, the actual use variable has an R^2 value of 0.939, indicating that the independent variable explains 93.9% of its variance, while 6.1% is due to other factors.

b. Uji Hipotesis

The original sample is used to determine the influence of the direction of the relationship between constructs, t-statistic is used to measure the level of significance on the hypothesis, and the last is p-values which is used to measure the level of significance of the hypothesis at different significance levels. The inner model or structural model in this study can be seen in the following table:

Table 5. of Hypothesis Test Results.

	Original sample (O)	T statistics (|O/STDEV|)	P values
Human -> Benefit	0.445	4.523	0.000
Human -> Organization	0.979	267.394	0.000
Human -> Technology	0.391	5.544	0.000
Organization -> Benefit	0.531	5.442	0.000
Organisasi -> Technology	0.597	8.510	0.000
Usefulness -> Actual Use	0.495	4.184	0.000
Usefulness -> Behavioral Interest	0.749	15.081	0.000
Usability -> Attitude	0.607	5.919	0.000
Ease To Use -> Usability	0.874	52.584	0.000
Ease To Use -> Attitude	0.268	2.977	0.003
Behavioral Interest -> Actual Use	0.490	4.134	0.000

Attitude -> Behavioral Interest	0.221	4.595	0.000

DISCUSSION

Table 6. Analysis of the Relationship

No	Variabel	Variabel	Original Sampel (O)	Mean	P Value
1	Perceived Ease Of Use	Perceived Usefulness	0.874	0.874	0.000
2	Perceived Ease Of Use	Attitude Toward Using	0.268	0.268	0.000
3	Perceived Usefulness	Attitude Toward Using	0.607	0.607	0.000
4	Perceived Usefulness	Actual Use	0.607	0.607	0.000
5	Perceived Ease Of Use	Actual Use	0.607	0.607	0.000
6	Attitude Toward Using	Actual Use	0.221	0.221	0.000
7	Human	Technology	0.391	0.391	0.000
8	Human	Net Benefit	0.445	0.445	0.000
9	Organization	Human	0.979	0.979	0.000
10	Technology	Organization	0.597	0.597	0.000
11	Organization	Net Benefit	0.391	0.391	0.000
12	Net Benefit	Technology	0.531	0.531	0.000

1. Perceived Easy of Use to Perceived Usefulness

   Based on Table 4.1, it can be seen that the results of test calculations using SmartPLS 4.0 show that there is a Perceived Ease Of Use (PEOU) relationship to Perceived Usefulness (PU) at Bhayangkara TK II Mas Kadiran Medan Hospital obtained a p-value of 0.000.

   This research aligns with the findings on the acceptance analysis of Online Shopping Applications conducted by Ali, Hamdan, and Mahaputra, which show an effect of perceived enjoyment on perceived usefulness. This finding supports the Technology Acceptance Model (TAM) model, which states that perceived enjoyment significantly affects perceived usefulness. Thus, the first model in this study is acceptable and justified to be developed in future research through the statement, "Perceived Enjoyment influences Perceived Usefulness." (Hapzi Ali et al., 2022)

   This research is in line with the findings of Fandy Gunawan, Mochammad Mukti Ali, and Arissetyanto Nugroho (2019) in a study entitled "Analysis of the Effects of Perceived Ease of Use and Perceived Usefulness on Consumer Attitude and Their Impacts on Purchase Decision on PT Tokopedia in Jabodetabek," which shows that perceived ease of use affects individual attitudes towards using technology. An increase in perceived ease of use instrumentally affects the increase in perceived usefulness because a system that is easy to use does not take a long time to learn so that individuals can do other things related to performance effectiveness. Thus, the first model in this study is acceptable and justified to be developed in future research through the statement, "Perceived Enjoyment influences Perceived Usefulness." (Gunawan et al., 2019)

   According to the researcher's assumption, if someone believes that the information system is easy to use, he will always use it, where the results of this study show that the construct of perceived ease of use affects perceived usefulness.

2. Perceived Ease Of Use to Attitude Toward Using

   Based on Table 4.2. It can be seen that the results of test calculations using SmartPLS 4.0 show that there is a Perceived Ease Of Use (PEOU) relationship to Attitude Toward Using (ATU). at Bhayangkara TK II Mas Kadiran Medan Hospital obtained a p value of 0.000.

   This research is in line with the findings in the acceptance analysis of the Hospital Management Information System (SIMRS) at RSD Balung, Jember Regency (2021), which shows that there is an effect of perceived ease of use on the perception of attitude towards using for SIMRS admins and users. This finding supports the Technology

Acceptance Model (TAM) model, which states that perceived ease of use has a significant effect on user attitudes towards the system. (Winda et al., 2022)

This research is in line with the findings of Muhammad Khairil Bustaman, Atik Aprianingsih, Malvin Hidayat, and Rima Elya Dasuki (2023) in a study entitled The Impact of Trust, Perceived Usefulness, Perceived Ease of Use, and Customer Intentions on Customer Attitudes Toward the Use of Technology, which shows that trust, perceived usefulness, and perceived ease of use can positively influence customer attitudes in adopting a technology, thus influencing their behavioral intentions to use the technology. (Bustaman et al., 2023)

According to the researcher's assumption, Attitude (attitude) or commonly called Attitude Towards Using (attitude towards use) is a form of positive or negative behavior from a person in response to whether the user is interested in using the system.

3. Perceived Usefulness to Attitude Toward Using

   Table 4.3 shows that the test calculation results using SmartPLS 4.0 show a relationship between Perceived Usefulness (PU) and Attitude Toward Using (ATU). at Bhayangkara TK II Mas Kadiran Medan Hospital obtained a p value of 0.000.

   This aligns with my research that the significance figure <0.000 indicates that Ha is accepted and Ho is rejected, with a t-statistic of 15.254 > 1.65256. Perceived Usefulness positively affects Attitude Towards Using the m-Commerce or Wholesale Ikens mobile app, with Perceived Effectiveness having the most significant influence (coefficient 0.505). The app's target market is 97.8% of business people or self-employed business owners, with 94% of customers located outside DKI Jakarta and 75% outside Java Island (Mirantika, 2022).

   According to the researcher's assumption, Perceived Usefulness is defined as the extent to which a person believes using a technology will improve his job performance. If someone believes that information systems are helpful, he will use them and have a positive and significant effect on their use.

4. Perceived Usefulness to Actual Use

   Table 4.3 shows that the test calculation results using SmartPLS 4.0 show a relationship between Perceived Usefulness (PU) and Attitude Toward Using (ATU). at Bhayangkara TK II Mas Kadiran Medan Hospital obtained a p value of 0.000.

   This aligns with my research that the significance figure <0.000 indicates that Ha is accepted and Ho is rejected, with a t-statistic of 15.254 > 1.65256. Perceived Usefulness positively affects Attitude Towards Using the m-Commerce or Wholesale Ikens mobile

app, with Perceived Effectiveness having the most significant influence (coefficient 0.505). The app's target market is 97.8% of business people or self-employed business owners, with 94% of customers located outside DKI Jakarta and 75% outside Java Island (Mirantika, 2022).

According to the researcher's assumption, Perceived Usefulness is defined as the extent to which a person believes using a technology will improve his job performance. If someone believes that information systems are helpful, he will use them and have a positive and significant effect on their use.

5. Perceived Ease of Use to Actual Use

   Table 4.1 shows that the results of the test calculation using SmartPLS 4.0 show a relationship between organizational and human factors at Bhayangkara TK II Mas Kadiran Medan Hospital, with a p-value of 0.000.

   In line with my research by Alifiardi and Arrizky Azhar (2019), the results show that perceived usefulness, ease of use, trust, and risk significantly affect the intention and actual use of the GOJEK application (Hutagalung et al., 2021).

6. Actual Use to Attitude Toward Using

   Based on Table 4.6, it can be seen that the results of the test calculation using SmartPLS 4.0 show that there is a relationship between organizational and human factors at Bhayangkara TK II Mas Kadiran Medan Hospital obtained a p-value of 0.000.

   This is in line with research conducted by (Aditya et al., 2023) with the title Use of Technology Acceptance Model in the Analysis of Actual Use of Commerce Use of Tokopedia Indonesia that the results of the t-test on the attitude towards using a variable on actual use obtained a t value of 3.474 with a significance value of 0.001. From these results, the value of t count ≥ t table of 1.984 with a significance of <0.05, then H0 is rejected, and Ha is accepted. So, it can be concluded that the attitude towards using variables significantly positively affects actual use (Rohman et al., 2023).

   The researcher assumes that the majority of respondents are willing to actively learn and implement the system to improve job performance and have mastered and applied SIMRS on a regular basis,

7. Human and Technology

   Based on Table 4.7, it can be seen that the results of test calculations using SmartPLS 4.0 show a relationship between the suitability of Human factors with technology at Bhayangkara TK II Mas Kadiran Medan Hospital obtained a p-value of 0.000.

This study does not agree with the findings of Afriza Faigayanti, Lilis Suryani, and Hamyatari Rawalilah in evaluating the Hospital Management Information System (SIMRS) in the outpatient department using the HOT-Fit method, which shows that system users are not related to net benefits. From the research results, 16% of respondents disagreed that SIMRS is easy to use, which indicates that the system's ease of use does not affect the net benefits obtained from using SIMRS (Faigayanti et al., 2022).

This research is in line with Putri, et al, where there is a suitability of human factors, organizational factors, and technology factors in producing benefits (net benefits) at Pariaman Hospital. This is because human factors, organizational factors, and technology factors have supported each other. (Kurnia Putri & Devi Fitriani, 2022)

8. Human and Net Benefit

   Table 4.8 shows that the results of the test calculation using SmartPLS 4.0 show a relationship between organizational and human factors at Bhayangkara TK II Mas Kadiran Medan Hospital, with a p-value of 0.000.

   This study's results are consistent with the study "The Effect of Human, Organization, and Technology on the Benefits of SIMRS at Asy-Syifa' Sambi General Hospital" by Syafitri Hasanah et al. (2022). Data analysis shows that human factors have a strong positive relationship with the benefits of SIMRS at Asy Syifa' Sambi General Hospital ($r=0.740$; $p<0.001$). In addition, multiple regression tests confirmed that human factors significantly affect the benefits of SIMRS ($B=0.112$; $p=0.026$), with every 1 unit increase in human factors contributing to increasing the benefits of SIMRS by 0.112 units. This indicates that the higher the score on human factors, the higher the score of benefits obtained from SIMRS in the hospital (Syafitri Hasanah et al., 2022).

   According to Supriyono et al. (2019) human factors have no effect on the overall benefits of evaluating SIMRS at Raden Mattaher Jambi Hospital. In this study, manual recording was still found in certain sections and certain positions, so that SIMRS was not used as a whole, SIMRS was also found that had not been integrated between several sections / departments and with several important departments. (Simorangkit et al., 2020)

9. Human and Organization

   Based on Table 4.1, it can be seen that the results of the test calculation using SmartPLS 4.0 show that there is a relationship between organizational and human factors at Bhayangkara TK II Mas Kadiran Medan Hospital obtained a p-value of 0.000.

This research is in line with Sabran in 2020. Research on user satisfaction variables shows that in the Human aspect, variable indicators of user satisfaction have an average minimum respondent answer score of 1.95 and an average maximum respondent answer score of 4.36. The overall average response from respondents to the user satisfaction variable indicator is 3.14, so it is included in the good enough category (Sabran et al., 2020).

10. Technology and Organization

    Based on Table 4.10, it can be seen that the results of the test calculation using SmartPLS 4.0 show that there is a Relationship between Technology and Organizational Factors at Bhayangkara TK II Mas Kadiran Medan Hospital obtained a p-value of 0.000.

    This research is not in line with the findings of Afriza Faigayanti, Lilis Suryani, and (Hamyatari Rawalilah, 2022) in evaluating the Hospital Management Information System (SIMRS) in the outpatient department with the HOT-Fit method, which shows that system quality is not related to net benefits. The results of data analysis show that system quality, including access speed, has no significant relationship to the net benefits obtained from using SIMRS. From the questionnaire data, 45% of respondents strongly disagreed that SIMRS has high access speed, indicating that perceptions of access speed do not affect perceived net benefits (Faigayanti et al., 2022).

    According to the researcher's assumption, many hospitals have made considerable investments to implement information systems, but some have experienced difficulties or failures in technology adoption. Failure of information system technology results in inefficient use of resources and decreased motivation to implement the system.

11. Organization and Net Benefit

    Based on Table 4.11, it can be seen that the test calculation results in test calculations using SmartPLS 4.0 show that there is a relationship between the Technology Factors and organization in Bhayangkara TK II Mas Kadiran Hospital Medan obtained a p-value of 0.000.

    The results of this study are the same as those of research from (Supriyono et al., 2019), which states that organizational factors affect the overall benefits of SIMRS evaluation at Raden Mattaher Jambi Hospital. This study also has the same results as research from (Puspita et al., 2020), which states that organizational structure affects the overall benefits of SIMRS in a case study of SIMRS implementation at Mayapada Hospital, South Jakarta (Supriyono, 2020) (Puspita et al., 2020).

However, according to (Prasetyowati & Kushartanti, 2018), organizational factors do not affect the benefits of P-Care users in five first-level health facilities (FKTP) in Semarang City. This is because the organizational aspects of the study lacked leadership, policy, and financing factors. Financing factors are needed in implementing training to increase the use of the P-Care information system.

12. Technology and Net Benefit

    Based on Table 4.12, it can be seen that the results of test calculations using SmartPLS 4.0 show that there is a Relationship between Technology and Organizational Factors at Bhayangkara TK II Mas Kadiran Medan Hospital obtained a p-value of 0.000.

    The results of this study are consistent with the findings of the study "The Effect of Human, Organization, and Technology on the Benefits of SIMRS at Asy-Syifa' Sambi General Hospital." (Syafitri Hasanah et al., 2022)

    The results of this study are the same as the results of research from Suryana et al. (2021) which states that technological factors affect the benefits provided by SIMRS in the SIMRS utilization improvement model at RSPI Prof. Dr. Sulianti Saroso. (Suryana et al., 2022)

    However, in contrast to the results of research by Supriyono et al. (2019), namely technological factors do not affect the overall benefits of SIMRS at Mattaher Jambi Hospital. This is because there are still deficiencies in system quality, information quality and service quality of SIMRS.. (Supriyono, 2020)

CONCLUSION

There are notable relationships among key system-use constructs at Bhayangkara Hospital TK II Mas Kadiran Medan. First, Perceived Ease of Use (PEOU) is related to both Perceived Usefulness (PU) and Attitude Toward Using (ATU), indicating that when users find the system easy to use, they tend to perceive it as applicable and develop a positive attitude toward using it. Perceived Usefulness (PU) is also linked to both Attitude Toward Using (ATU) and Actual Use (AU), suggesting that users who see the system as beneficial are more likely to adopt it and use it consistently. Additionally, there is a direct relationship between Perceived Ease of Use (PEOU) and Actual Use (AU), as well as between Actual Use (AU) and Attitude Toward Using (ATU), highlighting that ease of use and frequent usage contribute positively to users' attitudes.

Beyond individual perceptions, there are further connections among Human, Technology, and Organizational factors. The human element relates to net benefits and organization, emphasizing that individual user experiences influence perceived benefits and organizational dynamics. Human factors are also linked to Technology, showing the importance of user-technology interactions. Further, there are relationships between Technology and Organization, Organization and Net Benefit, and Technology and Net Benefit, underscoring the interdependence of these factors in achieving optimal outcomes for the hospital's information system. These relationships highlight the complex interactions between user experience, system ease of use, and organizational support in realizing successful system implementation and benefits at the hospital.

This study recommends further research using other evaluation methods to provide a broader perspective in assessing the implementation and performance of the Hospital Management Information System (SIMRS). Additionally, the findings can be applied in any hospital to improve SIMRS performance more effectively and efficiently. By adopting various evaluation methods, it is hoped that more optimal solutions can be found to enhance the quality of healthcare services through improved information systems.

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REFERENCES

Bustaman, M. K., Aprianingsih, A., Hidayat, M., & Dasuki, R. E. (2023). The Impact of Trust, Perceived Usefulness, Perceived Ease of Use, and Customer Intentions on Customer Attitudes Toward the Use of Technology. *Almana : Jurnal Manajemen Dan Bisnis*, *7*(2), 230–241. https://doi.org/10.36555/almana.v7i2.2133

Faigayanti, A., Suryani, L., & Rawalilah, H. (2022). Evaluasi Sistem Informasi Manajemen Rumah Sakit (SIMRS) di Bagian Rawat Jalan dengan Metode HOT -Fit. *Jurnal Kesehatan Saelmakers PERDANA*, *5*(2), 245–253. https://doi.org/10.32524/jksp.v5i2.662

Hapzi Ali, Hamdan, H., & M. Rizky Mahaputra. (2022). Faktor Eksternal Perceived Ease of Use dan Perceived Usefulness pada Aplikasi Belanja Online: Adopsi Technology Accepted Model. *Jurnal Ilmu Multidisplin*, *1*(3), 587–604. https://doi.org/10.38035/jim.v1i3.75

Mirantika, N. (2022). Analisis Penerimaan Teknologi M-Commerce Menggunakan Metode Technology Acceptance Model (TAM) Pada Penjualan Retail di Kabupaten Kuningan. *Nuansa Informatika*, *16*(1), 161–171. https://doi.org/10.25134/nuansa.v16i1.5236

Permadi, A., Irawati, T., & Widada, B. (2023). Analisis Perilaku Pengguna Website Sistem Informasi Akademik Menggunakan Technology Acceptance Model (TAM). *Jurnal Teknologi Informasi Dan Komunikasi (TIKomSiN)*, *11*(1), 17. https://doi.org/10.30646/tikomsin.v11i1.728

Puspita, S. C., Supriyantoro, ., & Hasyim, . (2020). Analysis of Hospital Information System Implementation Using the Human-Organization-Technology (HOT) Fit Method: A Case Study Hospital in Indonesia. *European Journal of Business and Management Research*, *5*(6), 1–8. https://doi.org/10.24018/ejbmr.2020.5.6.592

Rohman, A. N., Mukhsin, M., & Ganika, G. (2023). Technology Acceptance Model in Analyzing Actual Use of E - Commerce Tokopedia Indonesia. *Jurnal Ekonomi Manajemen Akuntansi Keuangan Bisnis Digital*, *2*(1), 25–36.

Supriyono, S. (2020). Evaluasi sistem informasi manajemen rumah sakit dengan metode hot fit di rumah sakit umum daerah raden mattaher jambi. *Journal of Information Systems for Public Health*, *4*(1), 38. https://doi.org/10.22146/jisph.17142

Suryana, A., Adikara, F., Arrozi, M. F., & Taufik, A. R. (2022). Model of Improving The Utilization of Hospital Management Information System (SIMRS) Based On Human, Organization Technology-Fit (Hot-Fit) Method at RSPI Prof. Dr. Sulianti Saroso. *Journal of Public Health Education*, *1*(2), 103–116.

Syafitri Hasanah, Wahyu Wijaya Widiyanto, & Sri Wulandari. (2022). Pengaruh Human, Organization and Technology Terhadap Manfaat Simrs Di Rsu Asy-Syifa' Sambi. *Journal Health Information Management Indonesian (JHIMI)*, *1*(2), 24–30. https://doi.org/10.46808/jhimi.v2i1.24

Tawar, Santoso, A. F., & Salma, Y. S. (2022). Model HOT FIT dalam Manajemen Sistem Informasi. *Bincang Sains Dan Teknologi*, *1*(02), 76–82. https://doi.org/10.56741/bst.v1i02.144

Wicaksono, S. R. (2022). *Teori Dasar Technology Acceptance Model* (Issue December 2022). https://doi.org/10.5281/zenodo.7754254