Jurnal Info Sains : Informatika dan Sains
Volume 14 , Number 01, 2024, DOI 10.54209/infosains.v14i01
ESSN 2797-7889 (Online)
https://ejournal.seaninstitute.or.id/index.php/InfoSains

Analysis of the implementation of the sisrute application (integrated referral information system) using the end user computing satisfaction (EUCS) method in Lamongan district health facilities

Achmad Nurul Mujahidin
AKI University Informatics Engineering

Article Info

Keywords:
Sisrute application,
EUCS,
Lamongan Regency Health Facilities

ABSTRACT

The government has issued a Letter from the Director General of Health Services on December 10 2018 regarding Applications for the Use of the Integrated Referral System (SISRUTE) to all District/City/Provincial Health Services. The implementation of Sisrute requires an understanding of the use of information systems in the work unit. This research aims to analyze the factors that influence User Satisfaction of the Integrated Referral System Application (SISRUTE) in Lamongan Regency health facilities. The sample in this study were 106 direct users of the SISRUTE application in Lamongan District Health Facilities. This research uses quantitative research with the EUCS method survey research. The results of this study show that there is an influence on satisfaction with using SISRUTE in Lamongan Regency health facilities. Respondents stated that the SISRUTE application was easy to use, and could even be used anytime and anywhere. Some of the reasons respondents rarely use SISRUTE are due to delays in hospital responses and internet connection instability. It can be concluded that perceived ease of use and interest in using it influence the use of the SISRUTE application in Lamongan Regency health facilities.

Corresponding Author:
Achmad Nurul Mujahidin
AKI University Informatics Engineering
Achmadmujahidin310@gmail.com

INTRODUCTION

In the era of digitalization of health services, a system is needed that provides comfort for both the public and health service providers. This is really needed in one type of service, namely referrals for health problems, so that they are right on target, on time and effective. Implementation of this integrated Referral System Application not only affects the continuity of health services from primary to advanced level but the monitoring and evaluation system of these services becomes the data needed in planning future health development.

Implementation of the SISRUTE application is a means of communication for the referral process that can provide referral information for individual health services. The

Jurnal Info Sains : Informatika dan Sains
Volume 14 , Number 01, 2024, DOI 10.54209/infosains.v14i01
ESSN 2797-7889 (Online)
https://ejournal.seaninstitute.or.id/index.php/InfoSains

SISRUTE application was implemented nationally at the end of 2018 to be used in making patient referrals between Health Service Facilities (Fasyankes) with limited cases, namely emergency cases. The implementation of competency-based referrals with the SISRUTE application is expected to be carried out quickly, precisely, effectively and efficiently so that it can improve the quality of health service referrals in Lamongan Regency.

Based on the results of previous research on the Implementation of the BPJS Health Patient Referral System at the Barrang Lompo Island Health Center, Makassar in 2020, an integrated referral system application (SISRUTE) has been used to view available hospitals. When opening the application, health workers at the community health center directly select the hospital where the service is available and enter patient data. With the SISRUTE application, there is no longer a need for hospitals to provide information to the Community Health Center. Based on the results of these interviews, sometimes the hospital makes a mistake in giving permission to be referred, when the patient arrives at the hospital it turns out that the health facilities or services there are full, and the patient is referred again to another hospital without any communication (Rahmadani et al., 2020) .

Being aware of the obstacles and the importance of using SISRUTE properly so that there are no more errors like this case, therefore in implementing Sisrute it is necessary to understand how to use the information system in the work unit. The aim of this research is to analyze satisfaction with the use of the integrated referral system (SISRUTE) in Lamongan District Health Facilities using the End User Computing Satisfaction (EUCS) method with 106 respondents. It is hoped that the results of this research can improve the quality of Referral services from the Sisrute Application in Lamongan Regency Health Facilities by knowing the factors that influence it and users can use it comfortably, safely and easily.

METHODS

This research is classified as descriptive research, namely research that describes what a variable, symptom or situation is. This research begins by knowing the problem of the research object to be studied, namely to find out whether there is a relationship between content, accuracy, format, ease of use, and timeliness with user satisfaction . After knowing the problem, literature studies and interviews are carried out to look for theories. theories that can be used as a reference to start research, as well as looking for journals related to this research topic.

RESULTS AND DISCUSSION

Validity test

Validity testing is carried out to ensure how well the instrument is used to measure the concept that should be measured, to test the validity of the construct which is carried out by correlating the question item scores with the total score.

Jurnal Info Sains : Informatika dan Sains
Volume 14 , Number 01, 2024, DOI 10.54209/infosains.v14i01
ESSN 2797-7889 (Online)
https://ejournal.seaninstitute.or.id/index.php/InfoSains

The results of the validity test calculations are shown in Table 2.

Variable	Items	R count	R table	Significant	Note
Content (content)	C1	0.654	0.160	0,000	Valid
	C2	0.530	0.160	0,000	Valid
	C3	0.912	0.160	0,000	Valid
	C4	0.742	0.160	0,000	Valid
	C5	0.616	0.160	0,000	Valid
	C6	0.503	0.160	0,000	Valid
	C7	0.572	0.160	0,000	Valid
Accuracy (Strength)	A1	0.439	0.160	0,000	Valid
	A2	0.919	0.160	0,000	Valid
	A3	0.897	0.160	0,000	Valid
	A4	0.903	0.160	0,000	Valid
	A5	0.642	0.160	0,000	Valid
	A6	0.549	0.160	0,000	Valid
	A7	0.430	0.160	0,000	Valid
Format (Display)	F1	0.388	0.160	0,000	Valid
	F2	0.912	0.160	0,000	Valid
	F3	0.921	0.160	0,000	Valid
	F4	0.417	0.160	0,000	Valid
	F5	0.377	0.160	0,000	Valid
	F6	0.358	0.160	0,000	Valid
	F7	0.289	0.160	0,000	Valid
Ease Of Use (Convenience)	E1	0.632	0.160	0,000	Valid
	E2	0.748	0.160	0,000	Valid
	E3	0.912	0.160	0,000	Valid
	E4	0.919	0.160	0,000	Valid
timeliness (Punctuality)	T1	0.439	0.160	0,000	Valid
	T2	0.919	0.160	0,000	Valid
	T3	0.897	0.160	0,000	Valid
	T4	0.903	0.160	0,000	Valid
	T5	0.642	0.160	0,000	Valid
	T6	0.549	0.160	0,000	Valid
	T7	0.430	0.160	0,000	Valid
	T8	0.910	0.160	0,000	Valid

From table 2 of the validity test results above using SPSS on 104 respondents' data, it can be concluded that all of the statement items have a calculated value > rtable and a significant p-value smaller than 0.05. So that all statement items can be used in this research (valid).

Jurnal Info Sains : Informatika dan Sains
Volume 14 , Number 01, 2024, DOI 10.54209/infosains.v14i01
ESSN 2797-7889 (Online)
https://ejournal.seaninstitute.or.id/index.php/InfoSains

Reliability Test

Reliability concerns the level of certainty of measurement results. A questionnaire is said to be reliable if it can provide relatively the same results when measurements are made again on different objects at different times or provides accurate results . The results of the reliability test calculations can be seen in Table 3.

Table 3. Reliability Test

Variable	Cronbach's alpha > 0.6	Information
Content (content)	0.881	Reliable
Accuracy (Strength)	0.842	Reliable
Format (Display)	0.762	Reliable
Ease Of Use (Convenience)	0.882	Reliable
timeliness (Punctuality)	0.881	Reliable

Cronbach Alpha values obtained from all the research variables show that the value is greater than 0.7, so all statement items can be said to be reliable, so they can be used in research.

Partial Correlation Analysis

This partial correlation analysis is used to determine the strength of the relationship between correlation between two variables where other variables that are considered influential are controlled or made constant (as control variables). Because the variables studied are interval data, the statistical technique used is Pearson Correlation Product Moment . Table 4 is the result of correlation analysis using SPSS.

Table 4. Correlation Analysis

Model	Satisfaction
Content	0.842
Accuracy	0.812
Format	0.817
Easy and Use	0.838
Timeliness	0.948

Based on the results of the analysis in Table 4, it can be concluded as follows:

1. The calculated r value of content (X1) on user satisfaction (Y) was 0.842, including a coefficient interval of 0.80 – 1.00 with a Very Strong relationship level and a significance value of the content variable of 0.000 < 0.05 so that there was a correlation between the content variable and satisfaction variable .
2. The calculated r value of accuracy (X2) on user satisfaction (Y) was 0.812, including the coefficient interval of 0.80 – 1.00 with a very strong relationship level and a significance value of the content variable of 0.000 < 0.05 so that there was a correlation between the content variable and satisfaction variable .
3. The calculated r format (X3) value for user satisfaction (Y) was 0.817, including a coefficient interval of 0.80 – 1.00 with a Very Strong relationship level and a

Jurnal Info Sains : Informatika dan Sains
Volume 14 , Number 01, 2024, DOI 10.54209/infosains.v14i01
ESSN 2797-7889 (Online)
https://ejournal.seaninstitute.or.id/index.php/InfoSains

significance value of the content variable of 0.000 < 0.05 so that there was a correlation between the content variable and satisfaction variable .

4. The calculated r value of ease of use (X4) on user satisfaction (Y) is 0.838, including the coefficient interval of 0.80 – 1.00 with a very strong relationship level and a significance value of the content variable of 0.000 < 0.05 so there is a correlation between the variables. content with the satisfaction variable .
5. The calculated r value of timeliness (X5) on user satisfaction (Y) was 0.948, including the coefficient interval of 0.80 – 1.00 with a Very Strong relationship level and a significance value of the content variable of 0.000 < 0.05 so that there was a correlation between the content variable and satisfaction variable .

Multiple Linear Regression Analysis

The multiple regression test in this research is intended to see how the independent variable influences the dependent. Using SPSS, multiple linear regression was obtained the results of Table 5 below:

Model	B
1 (Constant)	0.996
Content	0.166
Accuracy	1,026
Format	0.194
Easy of Use	-0.217
Timeliness	-0.503

Based on the results of regression analysis using SPSS it can be explained through a model. The regression obtained is as follows:

Y = 0.996 + 0.166

1. Constant = 0.996. This means that if the variables content, accuracy, format, ease of use and timeliness are considered equal to zero, then the satisfaction variable has a value of 0.996.
2. Content coefficient = 0.166. This means that if the content variable increases by 1 units while other variables are considered constant, then the dependent variable is satisfaction will experience an increase of 0.166
3. Accuracy coefficient = 1.026. This means that if the accuracy variable increases by 1 units while other variables are considered constant, then the dependent variable is satisfaction will experience an increase of 1,026.
4. Format coefficient = 0.194. This means that if the format variable increases by 1 unit while other variables are considered constant, the dependent variable, namely satisfaction, will be experienced an increase of 0.194.
5. Ease of use coefficient = -0.217 . This means that if the ease of use variable decreases by 1 unit while other variables are considered constant, then the dependent variable is satisfaction will experience a decrease of -0.217 .

Jurnal Info Sains : Informatika dan Sains
Volume 14 , Number 01, 2024, DOI 10.54209/infosains.v14i01
ESSN 2797-7889 (Online)
https://ejournal.seaninstitute.or.id/index.php/InfoSains

6. Timeliness coefficient = -0.503. This means that if the timeliness variable decreases by 1 units while other variables are considered constant, then the dependent variable is satisfaction will experience a decrease of -0.503.

Hypothesis testing

t test

The t test was carried out to partially test the level of significance of the influence of the independent variable on the dependent variable. The significance level used is 5%. Based on the results of the analysis, the results obtained as in Tables 4 and 5 using SPSS, partial test results are as follows:

1. Based on the results of the t test in the regression model, the significance value of the content variable is 0.000 < 0.05 (5% significance level). This means that it can be concluded that partially the content variable has a positive and significant effect on satisfaction .
2. Based on the results of the t test on the regression model , the significance value of the accuracy variable is 0.000 < 0.05 (5% significance level). This means that it can be concluded that partially the accuracy variable has a positive and significant effect on satisfaction .
3. Based on the results of the t test in the regression model, the significance value of the format variable is 0.000 < 0.05 (5% significance level). This means that it can be concluded that partially the format variable has a positive and significant effect on satisfaction .
4. Based on the results of the t test in the regression model , the significance value of the ease of use variable is 0.000 < 0.05 (5% significance level). This means that it can be concluded that partially the ease of use variable has a positive and significant effect on satisfaction .
5. Based on the results of the t test in the regression model, the significance value of the timeliness variable is 0.012 < 0.05 (5% significance level). This means that it can be concluded that partially the timeliness variable has a positive and significant effect on satisfaction .

F test

The F test is to show whether the independent variables included in the model have a joint influence on the dependent variable. Testing is carried out with a significance level of 5% or 0.05 . Based on the results of the analysis, the following results were obtained:

ANOVA [a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	846,644	5	169,329	472,364	,000 [b]
	Residual	35,847	100	,358		
	Total	882,491	105			

a. Dependent Variable: Y

b. Predictors: (Constant), X5, X1, X3, X4, X2

Jurnal Info Sains : Informatika dan Sains
Volume 14 , Number 01, 2024, DOI 10.54209/infosains.v14i01
ESSN 2797-7889 (Online)
https://ejournal.seaninstitute.or.id/index.php/InfoSains

Based on Figure 9 above, a calculated F value of 472,364 can be obtained with a significance level of 0.000. This shows that the calculated F significance level is smaller than the significance level value of 0.05 . This means that the variables content , accuracy , format , ease of use and timeliness together have a positive and significant influence on satisfaction .

Coefficient of Determination Test Results (R^2)

The coefficient of determination value shown by the R^2 value from the regression model is used to determine the amount of variability in the dependent variable which can be explained by the independent variables. Based on the results of the analysis, the following results were obtained:

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,979 [a]	,959	,957	,599

a. Predictors: (Constant), X5, X1, X3, X4, X2)

Based on table 7 above, it shows that the R^2 value is 0.957, which means that the variability of the satisfaction variable can be explained by the variables content, accuracy, format, ease of use and timeliness of 96%. Meanwhile, the remaining 4% is explained by other factors not included in this study.

Discussion

content variable influences the implementation of the Integrated Reference Information System Application .

Measuring user satisfaction in terms of the content of the Integrated Reference Information System Application. The content variable has a significant relationship to the Implementation of the Integrated Reference Information System Application, based on the results of the t test, a statistical t value of 8.827 > from t table 1.983 was obtained and the significance value of the content variable was 0.000 < 0.05 . This means that it can be concluded that the content variable has a positive and significant effect on satisfaction . So it can be concluded that the content hypothesis (X1) in this research is accepted.

The accuracy variable influences the implementation of the Integrated Reference Information System Application .

Measuring user satisfaction in terms of accuracy provided by the Integrated Reference Information System Application. For the accuracy variable , the results based on the t test, obtained a statistical t value of 4.893 > from the t table of 1.983 and a significance value for the accuracy variable of 0.000 < 0.05 . This means that it can be concluded that the accuracy variable has a positive and significant effect on satisfaction . So it can be concluded that the accuracy hypothesis (X2) in this research is accepted.

The format variable influences the Implementation of the Integrated Reference Information System Application

Measuring user satisfaction in terms of the Integrated Reference Information System Application Implementation format itself, where the format variable is based on the results

Jurnal Info Sains : Informatika dan Sains
Volume 14 , Number 01, 2024, DOI 10.54209/infosains.v14i01
ESSN 2797-7889 (Online)
https://ejournal.seaninstitute.or.id/index.php/InfoSains

of the t test, a statistical t value of 6.065 > from t table 1.983 is obtained and the significance value of the format variable is 0.000 < 0.05. This means that it can be concluded that the format variable has a positive and significant effect on satisfaction . So it can be concluded that the format hypothesis (X3) in this research is accepted.

The ease of use variable influences the implementation of the Integrated Reference Information System Application

Measuring user satisfaction in terms of ease of use in using the system such as the process of entering data, processing data, and searching for information. For the ease of use variable , based on the results of the t test, the statistical t value was -3.781 < from the t table 1.983 and the significance value of the ease of use variable was 0.000 < 0.05 . This means that it can be concluded that the ease of use variable has a negative and significant effect on satisfaction . So it can be concluded that the ease of use hypothesis (X4) in this research is accepted.

Timeliness variable influences the implementation of the Integrated Reference Information System Application

Measuring user satisfaction in terms of system timeliness in presenting or providing data and information needed by users. For the timeliness variable , based on the results of the t test, a statistical t value of -2.557 < from the t table is 1.983 and the significance value of the timeliness variable is 0.012 < 0.05 . This means that it can be concluded that the timeliness variable has a negative and significant effect on satisfaction . So it can be concluded that the timeliness hypothesis (X5) in this research is accepted.

CONCLUSIONS

The conclusions obtained from the research results are as follows: Based on the results of the data analysis that has been carried out, it can be concluded that of the 5 hypotheses proposed, all of them were accepted. In accordance with the problem formulation that has been described in the background, it is answered that the results of the partial analysis show that the content variable (X1), accuracy variable (X2), format variable (X3), ease of use variable (X4), timeliness variable (X5) has a positive and significant effect on user satisfaction of online shopping applications . Meanwhile, based on the results of the simultaneous analysis, it shows that the content variable (X1), the accuracy variable (X2), the format variable (X3), have a positive effect and the ease of use variable (X4), the timeliness variable (X5) have a negative, significant effect on implementation. Integrated Reference Information System Application. The results obtained from the calculated F value and the significance level show that the variables content , accuracy , format , ease of use and timeliness simultaneously influence user satisfaction of the Integrated Reference Information System Application.

REFERENCE

Abbas, W. 2013. Analysis of Student Satisfaction with the Yogyakarta State University Website . Vol. 1, No. 1

Ahmad Fitriansyah, "Measuring Website User Satisfaction Using the End User Computing Satisfaction (EUCS) Method". Journal of Information Systems , Vol. 02, No. 01, PP. 1-8, 2018

Apris Robi Darwis, Efrizon, "Analysis of E-Learning User Satisfaction as a Support for Learning Activities Using the EUCS Method". Vocational Journal of Electronics and Informatics Engineering, vol.7, no. 1, pp. 1-7, 2019

Asti Shofi Damayanti, "Evaluating User Satisfaction of the Tapp Market Application Using the EUCS (End User Computing Satisfaction) Method." Journal of Technology Development

Bancin, LJ, Putri, NA, Rahmayani, N., Kharisma, R., & Purba, SW (2019). Overview of the Integrated Referral System (Sisrute) at RSUD Dr. RM Djoelham Binjai 2019. Imelda Scientific Journal of Health Recording and Information , 5 (1), 16–19.

Chin, WW And Lee, Matthew. KO 2000. A Proposed Model And Measurement Instrument For The Formation Of Is Satisfaction : The Case Of End-User Computing Satisfaction

Doll, W.J., and Torkzadeh, G. 1991. The Measurement of End-User Computing Satisfaction: Theoretical Considerations .MIS Quarterly (15:1)

I Gusti Ngurah Agung Suaryana, "Quality and User Satisfaction with Web-Based Academic Information Systems". Scientific Journal of Accounting and Business, Vol. 11, no. 2, pp. 84-90, 2016

Information and Computer Science, vol. 2, no. 11, pp. 4833-4839, 2018

Ramon Adianto Djunant, "Satisfaction Analysis of End User Acceptance of the Branch Delivery System (Bds) System on Teller Cash Recycler (Tcr) Services Using End User Computing Satisfaction (Eucs) and Iso/Iec 12207:2008 in Bank Companies in Indonesia". Journal of Indonesian Information Systems (JSII) , Vol.3, No. 1 PP. 1-14, 2018