



Human-Organization-Technology (HOT) analysis on the primary care application users

Análisis de Tecnología de Organización Humana (HOT) en la aplicación de atención del usuario

SARI, Tri Purnama [1](#); HAMZAH, Zulfadli [2](#); TRISNA, Wen Via [3](#); PURWATI, Astri Ayu [4](#)

Received: 18/10/2019 • Approved: 16/03/2020 • Published 09/04/2020

Contents

[1. Introduction](#)

[2. Methodology](#)

[3. Results](#)

[4. Conclusions](#)

[Bibliographic References](#)

ABSTRACT:

This study was designed to conduct evaluation of primary care application users in the first class clinic in Riau province-Indonesia- using the EUCS method. The research subject was the operator of primary care information with a total sample of 255 primary clinics in Riau province within 2018-2019. The findings of this research show that there is a significant relationship between the human, organization, technology with performance and the satisfaction of P-care application users in the primary clinics in Riau province, Indonesia.

Keywords: Human, Organization, Technology, performance, EUCS method

RESUMEN:

Este estudio fue diseñado para evaluar a los usuarios de aplicaciones de atención primaria en la clínica de primera clase en la provincia de Riau, indonesia, utilizando el método EUCS. El sujeto de la investigación fue el operador de información de atención primaria con una muestra total de 255 clínicas primarias en la provincia de Riau en 2018-2019. Los hallazgos de esta investigación muestra que existe una relación significativa entre el ser humano, la organización, la tecnología con el rendimiento y la satisfacción de los usuarios de aplicaciones de P-care en las clínicas primarias de la provincia de Riau, Indonesia.

Palabras clave: humano, organización, tecnología, rendimiento, método EUCS

1. Introduction

1.1. Research Background

The development of information and communications technology and a wide information infrastructure have changed the pattern and the way the organization, institution, industry, and government do their activities(Hamzah, et.al., 2019). In fact, the dependency of an organization on information technology to achieve their strategic goal and organizational needs becomes the primary stimulant for the importance of information and communications technology. That dependency causes a high need for high-quality Information Technology for the organizational needs and users that are appropriate with the development. The management of company is demanded to improve the system of data processing and services in order to improve the quality

of company (Kadir, 2003).

The success of an information system can facilitate the performance of an organization. Both organization and information system users can feel the benefit of using it if it is successful to be implemented (Subiyakto & Ahlan, 2014). Therefore, the success of information system used in an organization is an important thing for the organization (Wisudiawan, 2015), including for health organization such as: hospital, Social Security Administration and Primary Clinic (Hamzah, et. al., 2019).

Primary clinic is one of the primary health services widely used by the community in accessing health services. Based on the latest data from Social Security Administration (BPJS) in August 2018, there were approximately 5,537 million people who used the primary clinic as the Primary Health service before going to a higher level of health services. (BPJS, 2016). Moreover, Social Security Administration provides primary care application (P-care) which is currently implemented by primary clinic for the easiness in accessing data into BPJS server for registration, diagnosis, therapy and laboratory service.

Through P-care application installed in each first-level health facility, it is expected that both the number of visits and referral number can be well-monitored so that the service quality of first-level health facility can be continuously monitored and evaluated annually (BPJS, 2016). However, many problems are encountered during the implementation of the system. Based on the result of a preliminary survey at five first-level health facilities showed the encountered problems in the use of p-care information systems such as error system, changed patient data, and output that did not meet the needs. The unclear organizational structure and Standard of Procedure (SOP) also became the internal problems at the health facilities. Consequently, it could influence on the satisfaction of the P-care application users and indirectly influenced the performance of the application users.

According to Delone and McLean (1992), end-user computing satisfaction is the widest probable measurement used from the success of the information system. The measurement that is usually used only includes the required activities related to computer or the need to achieve a certain work. One of the wide measurements is end-user computing satisfaction (EUCS) developed by Doll and Torkzadeh (1988).

Besides, according to Yusof et al., (2008), there are three causal components causing failure in the information system implementation. First, human who evaluates the information system based on the use of the system where the users in this research focus on human resources in the primary clinic. Second, the important component is the organization. In this case, the measurement is done by evaluating the organizational structure and the organizational environment that is strongly related to the support from top management and staffs in the use of the system. The third component is technology. It is used for measuring the implementation of the information system whether in form of system quality, information quality, and service quality. Besides, (Yusof et al., 2008), the model of the success of this system is adopted based on the category of comprehensiveness and specific evaluation, wide validation, and the implementation towards the HIS (Health Information Systems) evaluation (Yusof, Kuljis, & Papazafeiropoulou, 2008).

The user satisfaction is a determinant for the success in implementing an information system in a primary clinic. The survey about user satisfaction has never been conducted in terms of the P-care that is operated. It then made the researcher want to conduct this research to know the level of user satisfaction toward the information system in hospitals. The special objective of this research was to know the factor of human, organization, and technology towards the satisfaction of the users who used P-care application in the area of the primary clinics in Riau Province.

1.2. Primary care

Primary Care is an information system for patient services aimed for patients of BPJS (Social Security Administration); it is computer-based and online via the Internet. It is like its name that P-care is aimed for primary services (primary clinic and community health center) and processing the data starting from registration, diagnosis, therapeutical treatment, to laboratory examination. P-CARE is developed by PT. ASKES, which is the development of health care application that was previously used for SIDokkel and also used in primary clinic and community health center, especially for online participants verification.

1.3. Human-Organization-Technology (HOT) of Fit Model

Yusof et al., (2006) provides a new framework that can be used for evaluating the information system called Human Organization-Technology (HOT) Fit Model. This model positions the important components in the information system, such as Human, Organization, and Technology and the relevant relationship between those components (Sari & Trisna, 2019).

The Human component assesses the information system from the use of the system at the frequency and the extent of the functions and the information system investigation. System use is also associated with the people who use it, the level of user, training, knowledge, expectation, and acceptance or resistance towards the system. This component also evaluates the system from the aspect of user satisfaction (Sari, et. al., 2020). It is the overall evaluation from the user experience in using the information system and the potential impact of the information system. User satisfaction can be associated with the perception of usefulness and the user behavior towards information system affected by personal characteristics (Eris. L, 2006).

The component of the organization evaluates the aspects of organizational structure and organizational environment. The organizational structure consists of types, cultures, politics, hierarchy, planning, and system control, strategy, management, and communication. Leadership and supports from top management and staffs are important parts of measuring the success of the system. Meanwhile, the organizational environment consists of a source of funds, governance, politics, competition, inter-organizational relationship, and communication (Eris. L, 2006).

The component of technology consists of system quality, information quality, and service quality. System quality in information system at the health care institution is associated with the features available in the system including the performance of the system and the user interface. The ease of use, the ease to be learned, response time, usefulness, availability, flexibility, and security are the variables and the factors that can be assessed from the system quality. Information quality focuses on the information resulted by information system including the patient's medical record, report, and prescribing. The criteria used for evaluating the information quality are completeness, accuracy, punctuality, availability, relevancy, consistency, and data entry. Meanwhile, service quality focuses on overall supports received by the system service provider or technology. Service quality can be evaluated by the speed in giving responses, guarantee, empathy, and follow-up services (Eris. L, 2006).

1.4. End-User Computing Satisfaction (EUCS)

End-User Computing Satisfaction is an overall evaluation for the information system used by the system users related to the experience in using the information system. The experience in using an information system is measured for knowing whether the information system that is being used is effective and able to meet the expectation (Wiharja, 2010).

This EUCS evaluation model was developed by Doll & Torkzadeh in 1998. This model focuses on the satisfaction of the users towards the aspect of technology by assessing the content, accuracy, format, punctuality, and the ease of using the system (Doll, W. J, et al, 1995).

EUCS is a method to measure the level of satisfaction from the user of an application system by comparing the expectation and the actual from an information system (Hutami, camilla, 2016).

The following is an explanation from each dimension for measurement using the EUCS method according to Doll & Torkzadeh (1998): (Doll, W. J, et al, 1995).

1. The dimension of Content is a dimension for measuring the user satisfaction observed from the content of a system. The content of a system is usually in the form of function and module used by the system user and the information resulted by the system. Content also measures if the system generates information needed by the users. The more complete the module and the more informative the system, the level of satisfaction will be higher (Rasman, 2012).
2. The dimension of Accuracy is a dimension used for measuring user satisfaction according to the accuracy of the data when the system receives input and then processes it into information. The accuracy of the system is measured by observing how frequent the system generates wrong output when processing input from the users. Besides, it can be seen also from how frequent the error occurs in the process of data processing (Daimunthe. Ismianti, 2016).
3. The dimension of Format is a dimension to measure user satisfaction from the appearance (interface) of the application. According to Rasman (2012), dimension of format is aimed at measuring user satisfaction from the appearance (interface) and the esthetics of system interface design, format of the report or information generated by the system; it is done by seeing whether the interface of the system is attractive and whether the display of the system eases the users when using the system. Therefore, indirectly, it can influence the level of effectiveness from the users (Rasman, 2012).
4. The dimension of Ease of use is a dimension used for measuring satisfaction from the ease for the user or user-friendly in using the system, such as the process of inputting the data, data processing, and searching for required information (Rasman, 2012).

5. The dimension of Timeliness is a dimension for measuring user satisfaction from the punctuality of the system in presenting or providing the data and information needed by the users. A punctual system can be categorized as a real-time system, indicating that each request or input done by the users will be directly processed and the output will be displayed accurately without waiting for a long time (Rasman, 2012).

1.5. Performance

Performance according to Armstrong and Baron (1998) is about performing the job and the result achieved from the job. Performance is the result of a job that has a strong relationship with the strategic goal of an organization, consumer satisfaction, and the act of providing an economic contribution.

Mangkuprawira and Hubeis (2007) mention that employee performance is influenced by intrinsic and extrinsic factors of the employee. Intrinsic factors that influence the employee performance consist of education, experience, motivation, health, age, skill, emotion, and spiritual. Meanwhile, the extrinsic factors that influence the employee performance consist of physical and non-physical environment, leadership, vertical and horizontal communication, compensation, and control in the form of supervising, facility, workload, work procedure, punishment system, and so on.

The accomplishment of the performance of someone or an employee is because of the generated effort and action. The effort is in the form of the result of work (performance) accomplished by the employee. Performance can be obtained from education, work experience, and professionalism.

The components of employee performance indicator based on Lazer (1977) are as follows:

1. Technical competencies
 2. Knowledge owned by the employee
 3. The ability to use the method
 4. The occupational technique used by the employee
 5. Equipment used for performing the tasks
 6. The experience owned by the employee related to a similar job
 7. Training received by the employee
 8. Conceptual competencies
 9. The ability to understand the complexity of a company
 10. The adjustment of abstract concept from each unit into operational implementation in the company as a whole
 11. Responsibility as an employee
 12. The ability for interpersonal relationship
 13. The ability to cooperate with other people
 14. Motivating employees
 15. Negotiating
 16. Work generated by the employees
-

2. Methodology

2.1. Data Collection Method

The data used in this research was the primary data collected from a questionnaire. The population of this research was the primary clinics in Riau province from 2018 to 2019. Sampling was done using the *non-probability sampling technique* with the purposive sampling method. The criteria used in determining the total sample were as follows:

- (1) The primary clinic has been registered before 2014. The company that has been registered after 2014 was not included in the research sample due to unavailability of research data.
- (2) The primary clinic that has cooperated with the Social Security Administrative Body for Health (*BPJS kesehatan*) and used the primary care application

Based on the criteria for selecting the sample above, the total sample of this research was 255 primary clinics.

2.2. Research Variable

The research variable included exogenous variables(X) and endogenous variables(Y). The measurement of each research variable was conducted as follows:

Exogenous Variables (X)

The exogenous variables (X) in this research were Human, Organization, and Technology. The measurement indicator of Human consisted of 2 things, namely knowledge and attitude. Furthermore, the action of using the information system of an organization consisted of leadership, planning, and policy. Meanwhile, the indicators of Technology consisted of service quality, system quality, and information quality.

Endogenous Variables (Y)

The endogenous variables (Y) in this research were Computing Satisfaction and performance. Computing satisfaction consisted of some indicators, namely Content, Accuracy, Format, Ease of Use, and Timeliness. The performance consisted of an instrument of "high enthusiasm in performing the job", completing the tasks on time, skillful in performing the job, and performing the tasks based on the quality.

2.3. Data Analysis Technique

The technique of data analysis used in this research was *path analysis* assisted by SmartPLS3.0. Before designing the regression equation, a multicollinearity test and FIT model were done first to examine the research model that would be used.

3. Results

3.1. Analysis of Demography

To know the distribution of the demographic characteristics of respondents in this research, the respondents were classified based on gender, age, educational background, and working period as seen in table 3.1 as follows:

Table 3.1
Analysis of Demography

Demography		Total	Percentage
Sex	Male	89	40%
	Female	136	60%
age	Below 20 years	89	35%
	20-30 years	99	39%
	30-40 years	51	20%
	Up to 40 years	16	6%
Education	High School	67	30%
	Diploma	116	52%
	Bachelor Degree	42	19%
Working Period	1-5 years	85	38%
	5-10 years	43	19%
	More than 10 years	97	43%

Based on the table above, the majority of the respondents are female with a percentage of 60%, while the male has a percentage of 40%. According to the age, the majority of the respondents

were at the age of 20-30 years with a percentage of 39%, and the respondents under 20 years old had a percentage of 35%. It indicates that the majority of the employees work at a productive age. Based on the educational background, the majority of the respondents of 52% had D3 certificate (associate degree), while based on their work duration, the majority of the respondents who worked more than 10 years was 43%.

3.2. Validity and Reliability Tests

The validity test shows how valid and relevant of each question attributes about service quality in this research to be examined further. The result of the validity test shows the number of corrected item-total correlation of all HOT variables. Computing satisfaction and performance was at the value of corrected item-total correlation > 0.3 and it could be denoted as valid. The fulfillment of this validity number was done after issuing some items of invalid questions so that it could proceed to the next analysis (Hair et al., 1988). The reliability test also shows the relevancy of question attributes in each variable of HOT. Computing satisfaction and performance had a Cronbach alpha value of > 0.6 , indicating that all variables in this research are reliable (Hair et al., 1988).

3.3. FIT Model

The FIT model was used to know the appropriateness of research model generated using *path analysis* model based on the criteria that had been established. The result of the FIT model examination is illustrated in table 3.2.

Table 3.2
Model FIT

No	FIT	Model Estimation		Conclusion
1	SRMR	0.046	< 0.08	Fit
2	Chi-square	955.843	> 258.837	Fit
3	NFI	1.147	> 0.90	Fit

Source: Data Processed (2019)

From the result of the examination in table 3.2 above, it can be known that the research model resulted from the analysis is good and appropriate to be analyzed further.

3.4. Multicollinearity Test

Multicollinearity test was aimed at examining if there was a correlation between independent variables in the regression model. In a good regression model, there should be no correlation between independent variables. This multicollinearity test was examined using the Variance Inflation Factor (VIF). If the VIF value was less than 10, it could be concluded that the research model was free from multicollinearity symptom. On the other hand, if the VIF value was greater than 10, it could be concluded that the research model had multicollinearity symptom.

Table 3.3
Multicollinearity Test

Variables	VIF	Value
Human	1.956	< 10
Organization	3.380	
Technology	1.354	

Computing Satisfaction	2.112
Performance	1.445

From the result of multicollinearity test, it can be seen that Human, Organization, Technology, Computing Satisfaction and Performance has a VIF value of < 10. It can be concluded that the research data was free from multicollinearity symptom.

3.5. Coefficient of Determination Test

The R-square value shows how strong the relationship between independent variables and dependent variables is. The coefficient of determination value is approximately 0 to 1. The more it closes to 1, it indicates the better model used in the research since the number of errors that cannot be controlled is smaller.

The Adjusted R-Square value was 0.356 or 35.6%. It indicates that 35.6% of computing satisfaction is influenced by human, organization, and technology, while the remaining of 64.4% is influenced by other variables that are not investigated in this research.

The Adjusted R-Square value had a value of 0.523 or 52.3%. It indicates that 52.3% of profitability is influenced by human, organization, technology, and computing satisfaction, while the remaining of 47.7% is influenced by other variables that are not investigated in this research.

3.6. Path Analysis

The regression analysis was done to examine the hypotheses about the influence of independent variables (Human, Organization, and Technology) towards dependent variables (Computing Satisfaction and performance). The regression analysis was used because the total independent variable was more than one. The structural equation that can be made in this research is as follows.

$$CS = 0.287 \text{ Hum} + 0.486 \text{ Org} + 0.458 \text{ Tech}$$

$$\text{Perf} = 0.287 \text{ Hum} + 0.486 \text{ Org} + 0.458 \text{ Tech} + 0.725 \text{ CS}$$

3.7. Hypothesis Testing (T-test)

This testing was done to know the influence between independent variables and dependent variables partially. The testing was done by comparing the calculated-t value and tabulated-t value or observing each *p-value* so that it could be determined if the hypothesis was fulfilled.

Table 3.3
Test of Hypotheses

Variables	T-Stat	P-Value
Human >> Computing Satisfaction	3.154	0.002*
Organization >> Computing Satisfaction	2.758	0.051***
Technology >> Computing Satisfaction	6.922	0.000*
Computing Satisfaction >> Performance	26.602	0.000*

Source : Data Processed (2019) (***) sig 10%, * sig 1%)

Based on table 3.3, it can be concluded that the results of the hypothesis testing to know the influence between independent variables and dependent variables partially are as follows:

1. Human has a positive and significant influence on Computing Satisfaction with a significance level of 1% and tabulated-t of 3.154.
2. Organizing process has a positive and significant influence on Computing Satisfaction with a significance level of 10% and tabulated-t of 2.758.
3. Technology has significant influence on Computing Satisfaction with a significance level of 1% and tabulated-t of 6.922.
4. Computing Satisfaction has a positive and significant influence on performance with a significance level of 1% and tabulated-t of 26.602.

3.8. Discussion

A human was significantly associated with the satisfaction of the users of P-care application in the primary clinics. It is in line with an investigation conducted by (Doll et al., 2011; Yusof MM et al., 2006; Wiharja et al., 2010; Sari, M.M et al., 2016; Prasetiowati & Kushartanti, 2018; Adrianti & Usman, 2018). People who have low knowledge, attitude, and the action of using an information system tend to feel dissatisfied towards the use of P-care application in the Primary clinics in Riau province. The low knowledge of the registration officer was caused by low education level. It can be seen that most of the registration officers in the primary clinics in Riau province were senior high graduates. The unreadiness of the P-care application users can also influence the level of user satisfaction. The acceptance and the resistance towards the application were caused by low knowledge of the application users. Consequently, it extremely influenced the action of using the application, especially when the error occurred on the application. Hence, human (knowledge, attitude, and the action of using the application) could influence the satisfaction of the p-care application users, and it could influence the registration officers' performances in the primary clinics.

Organizing process was significantly associated with the satisfaction of P-care application users at the primary clinic. It is in line with an investigation conducted by Doll et al., 2011; Yusof., et al., 2006; Wiharja et al., 2010; and Sari, M.M et al., 2016. A leadership style, the supports from top management, and supports from staffs were the vital part in measuring the success of the system or application used. Like P-care application that was used by the primary clinic in Riau province, the role of a leader was very important for decision-making in monitoring, planning, implementing, and decision-making in applying p-care application. Besides, good communication between supervisors and colleagues was required, especially when an error occurred and there was a problem in data entry. The leaders were needed for these roles, especially when determining a policy rapidly and accurately because when the registration officers took a long time in performing their job for registration, the patients would wait for more than 2 minutes. The registration that took a long time could influence the registration officers' performances since the minimum standard of services by a registration officer based on health minister regulation no : 129/MenKes/SK/II/2008 was less than or equal to 2 minutes.

The technology was significantly associated with the satisfaction of p-care application users at the primary clinic. It is in line with an investigation conducted by Doll et al., 2011; Yusof MM et al., 2006; Davern, Michael J, 2006; Wiharja et al., 2010; Sari, M.M et al., 2016; and Prasetiowati & Kushartanti, 2018. Technology is extremely associated with the level of satisfaction of the computer application users including BPJS application, namely P-care, implemented in the primary clinics in Riau province. The components contained in an evaluation of the information system of technology are service quality, information quality, and system quality that can influence the level of satisfaction of the application users. It indicates that the better the system quality, information quality, and service quality are, it can increase the use of the system and user satisfaction. The quality of technology in the p-care application (system quality, information quality, and service quality) used by the registration officers in the primary clinics in Riau province was less than good. It was caused by the error that was sometimes encountered in the system. The data of the patient would not be inputted if they were power outages so that the patient did not get the referral number of BPJS, the complaint column in the p-care application could not be filled out, and the patient data being inputted was not saved, and it could not be opened by the registration officers of the primary clinic. It then affected the process of composing the report for the clinic. The pros and cons of technology quality indirectly influenced the performance of the registration officers. In this case, they experienced a problem in providing services to the patients and the registration duration in preparing the clinic's report.

4. Conclusions

4.1. Conclusion

P-care application is one of the applications launched by Social Security Organizing Agency (BPJS) that is implemented in all regions in Indonesia including the primary clinics in Riau province. This p-care application is applied and aimed at the registration officers to perform the registration and provide a referral to the patients easily, quickly, and accurately. However, many registration officers are still dissatisfied with the use of the application.

Based on the result of the research, it is found that the factors such as human (knowledge, attitude, and action), organization (leadership, planning, and policy), and technology (information quality, system quality, and service quality) have a significant relationship with the dissatisfaction and the performance of p-care application users in the primary clinics in Riau province. In other words, the factors of human, organization, and technology can influence the satisfaction of P-care application users and indirectly influence the performance of the registration officers because they cannot perform their job optimally. Besides, the use of the application cannot be fully accepted by the users, and the application still has weaknesses. Therefore, the researcher believes that evaluation and improvement should be performed to the application by BPJS officers.

4.2. Suggestions

The research that is currently conducted is still limited to three factors (human, organization, and technology) and the influence on satisfaction and performance. Actually, many other factors can influence the satisfaction and the performance of the application users, such as supervision factor. Therefore, the next research can possibly observe the influence of supervision factor with a wider scope of the research object.

4.3. Acknowledgement

This research is funded by Directorate of Research and Community Service, Directorate General of Research and Development, Ministry of Research, Technology and Higher Education (KEMENRISTEKDIKTI) and STIKes Hang Tuah Pekanbaru.

Bibliographic References

- Armstrong, M. and Baron, A. (1998). *Performance Management – The New Realities*. London: Institute of Personnel and Development.
- BPJS online. (2016, January 22). *Mengenal P-Care BPJS Kesehatan*. Retrieved From <https://www.bpjs-online.com/mengenal-pcare-bpjs-kesehatan/>.
- Dalimunthe, Nurmaini & Ismianti, Cici. (2016). Analisis Tingkat Kepuasan Pengguna Online Public Access Catalog (OPAC) Dengan Metode EUCS (Studi Kasus: Perpustakaan UIN SUSKA Riau). *Jurnal Rekayasa dan Manajemen Sistem Informasi*, 2 (1). 71-75.
- Davern, Michael J. (2006). *Towards a Unified Theory of Fit: Task, Technology and Individual*. Retrieved from : http://epress.anu.edu.au/info_systems02/mobile_devices /ch03s02.html.
- DeLone, W.H., & McLean, E. R. (1992). Information System Success: The Quest for the dependent Variable. *Journal of Management Information Systems*, 3(40), 60-95.
- Doll, W. J., & Torkzadeh, G. (1988). The Measurement of End-User Computing Satisfaction. *Management Information System Quarterly*, 2(2), 2559-274.
- Doll, W. J., Raghunathan T. S., Lim, J. & Gupta, Y. (1995). A Confirmatory Factor Analysis of the User Information System Satisfaction Instruments. *Information Systems Management*, 6(2), 177-188.
- Eris, L. (2006, October 06). *Sistem Informasi Kesehatan, SIMKES UGM*. Retrieved from <https://simkesugm06.wordpress.com/2006/10/03/model-evaluasi-sistem-informasi/>
- Hair, J.F.J., Anderson, R.E., Tatham, R.L., Black, W.C., (1998). *Multivariate Data Analysis, 5th edn*. New Jersey : Prentice Hall, Upper Saddle River.
- HAMZAH, M. L., RUKUN, K., RIZAL, F., & PURWATI, A. A. (2019). A review of increasing teaching and learning database subjects in computer science. *Revista ESPACIOS*, 40(26).
- HAMZAH, M. L., DESNELITA, Y., PURWATI, A. A., RUSILAWATI, E., KASMAN, R., & RIZAL, F. (2019). A review of Near Field Communication technology in several areas. *Revista ESPACIOS*, 40(32).

- Hutami, Rr. Rieke F., & Camilla, Dhea Ratna. (2016). Satisfaction Analysis on TCS System Users Using End User Computing Satisfaction Methods (Case study: pt. tlk, bandung). *Jurnal manajemen Indonesia*, 16 (1). 15-24
- Kadir, A. (2003). *Pengenalan Sistem Informasi*. Yogyakarta: Andi Offset.
- Lazer, R dan Wikstrom, W. (1977). Appraising Managerial Performantas Home. *Conference Board*.
- Mangkuprawira, S., & A.V. Hubeis,. (2007). *Manajemen Mutu Sumber Daya Manusia*. Bogor : Penerbit Ghalia Indonesia.
- Prasetyowati, A., & Kushartanti, R. (2018). Pengaruh Faktor HOT (Human, Organisasi, Dan Teknologi) Terhadap Kepuasan Pengguna Sistem Informasi Primary Care Di Wilayah Kota Semarang. *Jurnal Manajemen Informasi Kesehatan Indonesia*, 6(1): 63-67.
- Rasman, (2012). *Gambaran Hubungan Unsur-unsur End-user Computing Satisfaction terhadap Kepuasan Pengguna Sistem Informasi Rumah Sakit Umum Daerah Kota Depok tahun 2012*. Skripsi dipublikasikan. Retrieved from : <http://lib.ui.ac.id/file?file=digital/20318250-SYael%20Indra%20Kusuma%20Rasman.pdf>
- Sari, T., Trisna, W., Octaria, H., & Jepisah, D. (2019). HUBUNGAN HUMAN, ORGANISASI, DAN TEKNOLOGI TERHADAP KEPUASAN PENGGUNAAN APLIKASI PRIMARY CARE DI KLIKIK PRATAMA KOTA PEKANBARU. *Jurnal Manajemen Informasi Kesehatan Indonesia (JMiki)*, 7(2), 104. doi:<http://dx.doi.org/10.33560/jmiki.v7i2.237>
- Sari, T. P., & Trisna, W. V. (2019). Evaluation of Primary Care Application Users in the First Class Clinic in Pekanbaru District on Human, Organization and Technology Factors Using the EUCS Method. *International Conference of CELSciTech 2019 - Social Sciences and Humanities track (ICCELST-SS 2019), Advances in Social Science, Education and Humanities Research, volume 373*, 92-97.
- Sari, M.M., Sanjaya, G.Y., Meliala, A. (2016). Evaluasi Sistem Informasi Manajemen Rumah Sakit (SIMRS) Dengan Kerangka Hot-Fit. *Seminar Nasional Sistem Informasi Indonesia*. 203-208.
- Subiyakto, A. & Ahlan, A. R. (2014). Implementation of Input-Process-Output Model for Measuring Information System Project Success. *Telkomnika Indonesian Journal Of Electrical Engineering*, 12 (7), 5603-5612.
- Wiharja, Kemas Rahmat., Santosa, Paulus Insap., & Cahyono, Ari,. (2010). Extending the Chin and Lee's End User Computing Satisfaction Model with the Task-Technology Fit Model. *ACIS 2010 Proceedings*.
- Wisudiawan , Gede A.A. (2015). Analisis Faktor Kesuksesan Sistem Informasi menggunakan Model Delone and Mclean. *Jurnal Ilmiah Teknologi Informasi Terapan*, 2 (1), 55-59.
- Yusof, M. M., Paul, R .J. Stergioulas, L. K. (2006). Towards a Framework for Health Information System Evaluation. *Proceedings of the 39th Annual Hawaii International Conference*.
- Yusof, M. M., Paul, R. J., & Stergioulas, L. K. (2006). Towards a framework for health information systems. *Proceedings of the Annual Hawaii International Conference on System Sciences*, (Vol. 5). [1579480] DOI: 10.1109/HICSS.2006.491
- Yusof, M.M., Kuljis,J., Papazafeiropoulou, A., & Stergioulas, L. K. (2008). An Evaluation Framework for Health Information Systems: Human, Organization and Technology-fit Factor (HOT-fit). *International Journal of Medical Informatics*. 77(6), 386-398.

1. Senior Lecture at Medical Record and Health Information Department. Hang Tuah Pekanbaru School of Health Science, Indonesia. tripurnamasariayi@gmail.com

2. Senior Lecture at Islamic Banking Department. Faculty of Islamic Religion. Universitas Islam Riau. Indonesia. zulfadlihamzah@fis.uir.ac.id

3. Junior lecture at Medical Record and Health Information Department. Hang Tuah Pekanbaru School of Health Science, Indonesia. wenviatriisna@htp.ac.id

4. Senior Lecture at Management Department. Business and technology Institute of Pelita Indonesia. asti.ayu@lecturer.pelitaindonesia.ac.id



This work is under a Creative Commons Attribution-
NonCommercial 4.0 International License