

# THE ACCEPTANCE OF MEDICAL RECORD OFFICER TOWARDS MRMIS IN X HOSPITAL MATARAM

Penerimaan Petugas Rekam Medis terhadap SIMRM RS X Kota Mataram

\*Nurul Khatimah Ismatullah<sup>1</sup>, Aris Puji Widodo<sup>2</sup>, Sri Achadi Nugraheni<sup>1</sup>

<sup>1</sup>Faculty of Public Health, Diponegoro University, Indonesia

<sup>2</sup>Faculty of Science and Mathematics, Diponegoro University, Indonesia

Correspondence\*:

Address: Jl. Prof. Sudarto No.13 Tembalang, Semarang, Indonesia | e-mail: nurulkhatimahismatullah@gmail.com

## Abstract

**Background:** MRMIS needs to be evaluated to know the actual conditions of implementing the system. One of the evaluations that can be done is user acceptance of MRMIS.

**Aims:** The study aims to determine MRMIS acceptance in X hospital Mataram City based on the variables in the UTAUT model.

**Methods:** This is a quantitative study with a correlational approach. The sample size was 70 medical record officers using total sampling. Data processing used Partial Least Square (PLS) method.

**Results:** The test results showed the t-statistic of effort expectancy was 2.507, facilitating conditions 3.787 behavioural intention 4.928, however the performance expectancy, social influence and moderate variables like age and gender variables had t-statistic values below 1.96.

**Conclusion:** The variables of effort expectancy, enabling conditions, and behavioural intentions all have a significant impact on respondent acceptance of MRMIS, whereas the variables of performance expectancy, social influence, and moderate variables of age and gender do not.

**Keywords:** Information Systems, Medical Records, PLS, UTAUT

## Abstrak

**Latar Belakang:** Penerapan sistem informasi perlu dilakukan evaluasi agar diketahui kondisi sesungguhnya dari penerapan sistem tersebut, salah satu evaluasi yang dapat dilakukan yaitu evaluasi mengenai penerimaan pengguna terhadap SIMRM

**Tujuan:** Penelitian bertujuan untuk mengetahui penerimaan SIMRM di RS X Kota Mataram berdasarkan variabel pada model UTAUT

**Metode:** Merupakan penelitian kuantitatif dengan pendekatan korelasional. Sampel dipilih sebanyak 70 petugas dengan cara total sampling. Data dikumpulkan menggunakan kuesioner serta diolah menggunakan metode Partial Least Square (PLS).

**Hasil:** Hasil uji menunjukkan nilai t-statistik dari setiap variabel yaitu effort expectancy (2,507), facilitating conditions (3,787) behavioral intention (4,928), sedangkan variabel performance expectancy, variabel social influence dan variabel moderat usia dan jenis kelamin memiliki nilai t-statistik dibawah 1,96

**Kesimpulan:** Variabel effort expectancy, variabel facilitating conditions, dan variabel behavioral intention berpengaruh signifikan terhadap penerimaan SIMRM oleh petugas, sedangkan variabel performance expectancy, variabel social influence, dan variabel moderat usia dan jenis kelamin tidak signifikan.

**Kata kunci:** PLS, Rekam Medis, Sistem Informasi, UTAUT



Indonesian Journal of Health Administration (Jurnal Administrasi Kesehatan Indonesia)

p-ISSN 2303-3592, e-ISSN 2540-9301

Volume 10 No.1 2022 DOI: 10.20473/jaki.v10i1.2022.89-98

Received: (2022-01-06), Revised: (2022-03-08) Accepted: (2022-05-23) Published: (2022-06-30)

Published by Universitas Airlangga in collaboration with Perhimpunan Sarjana dan Profesional Kesehatan Masyarakat Indonesia (Persakmi).

This is an Open Access (OA) article distributed under the terms of the Creative Commons Attribution Share-Alike 4.0 International License (<https://creativecommons.org/licenses/by-sa/4.0/>).

## Introduction

Advances in health technology, especially in hospitals, are needed because the implementation of management in hospitals often has difficulty in managing information so that it is necessary to improve the management of information that is efficient, fast, easy, safe, integrated and accountable so that hospitals need an information system to support health services. The Indonesian Minister of Health's Regulation No. 1171 year 2011, which says that hospitals must operate hospital information systems, supports the deployment of the information system. Hospital management information system is a communication information system that can process and harmonise all hospital service processes such as coordination, reporting and administrative procedures in order to obtain appropriate and accurate information (The Indonesian Minister of Health's Regulation No. 82 year 2013 on Hospital Management Information System).

Based on data from the Association of Hospitals throughout Indonesia (PERSI) in mid-2020 there are 2560 hospitals in Indonesia, 2177 of which have used hospital information systems and functions, one of which is the X Hospital in Mataram City. X hospital has implemented a management information system in the medical record section (MRMIS / SIMRM) since 2014 in all installations including medical records installations. The installation of medical records is one of the parts responsible for the application of information systems, this is in accordance with one of the competencies possessed by the medical recording profession, namely data management and health information (Decree of the Minister of Health of the Republic of Indonesia No: HK.01.07/Menkes/312/2020).

As long as MRMIS is applied, of course, there are obstacles experienced by officers including system errors, and some features of MRMIS are not used by officers. The results of the preliminary study show that as many as 35.71% of officers feel MRMIS often experience interference and some features are not used because it is not in accordance with the work needs of

medical record installation officers, and it is known that during MRMIS applied there has never been an evaluation related to the officer's acceptance of MRMIS. Evaluation of information systems is an effort made to find out the true condition of the implementation of information systems, and through evaluation can be known the achievements of the application of the system so that action can be done to improve the performance of the information system (Putra, 2020).

The UTAUT (unified theory of acceptance and use of technology) evaluation model can be used to determine the user's acceptance of MRMIS based on these findings. The Theory of Reasoned Action (TRA), Technology Acceptance Model (TAM), Motivational Model (MM), Theory of Planned Behavior (TPB), combined TAM and TPB, model of PC utilisation (MPTU), innovation diffusion theory (IDT), and social cognitive theory are all used in the UTAUT evaluation model (Venkatesh, 2003).

The purpose of the study was to determine the acceptance of MRMIS in X hospitals in Mataram City based on each variable in the UTAUT model so that it can be used as one of the considerations in decision making that is useful for MRMIS improvement.

## Method

The study was conducted from July 2021 to September 2021. Some of the stages carried out in this study are presented in figure 1.

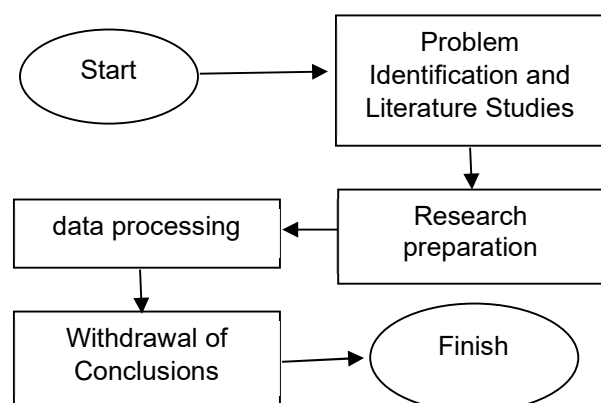


Figure 1. Research Stage

## Problem Identification and Literature Studies

The initial stage is to identify problems at the research site so that the preparation of research problems can be done, then a literature study is conducted aimed at obtaining theories and information that can support the research process.

## Determination of Evaluation Model

Based on the results of problem identification and literature studies can be determined the evaluation model used Venkatesh's UTAUT model is used in this research (2003) which has been modified using only two moderation variables namely age and gender, the following UTAUT evaluation model applied to this study presented in Figure 2.

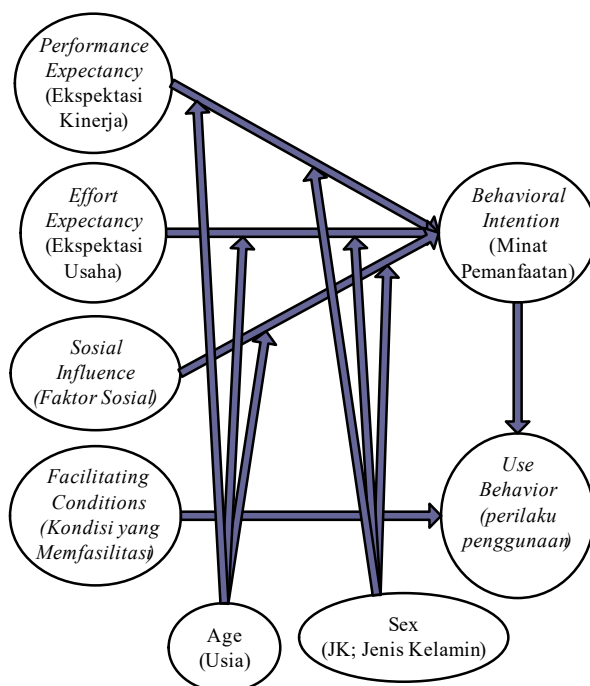


Figure 2. Modified UTAUT Evaluation Model

## Research Preparation

The research conducted is a quantitative research with a correlational approach. Quantitative research is a study whose measurement of data is obtained through scientific calculations obtained from samples of people who respond to inquiries in order to determine the frequency of responses (Creswell, 2018), while correlational research is a study to

find out the relationship of a variable with one or more variables (Azwar, 2010).

The sample in this study was determined by the total sampling technique so that the sample used was all officers at the medical record installation of the X hospital in Mataram City which numbered 70 people. Data collection is carried out using research instruments in the form of questionnaires with a five-tier strongly agree, agree, disagree, strongly disagree on a likert scale.

## Data Processing

Data processing in research using Smart-PLS (Partial Least Square) software, with such software can be done with the outer model, inner model, and hypothesis models.

The purpose of outer model testing is to determine the validity and reliability of research instruments. Testing the validity of the instrument refers to the value of the outer loading and AVE, while the reliability test uses the value of Cronbach's alpha and composite reliability.

The inner model test is based on the R-Square value. The inner model is used to explain the relationship between research variables.

A path coefficient model test is used to perform the hypothesis test. Observe the original sample value to see the direction of the relationship and the t-statistical value to see its significance when testing the path coefficient model. A significant variable if it has a t-statistical value  $> t$ -table (1.96). Here are the hypotheses in this study:

H1 : There is a correlation between performance expectancy (PE) and behavioral intention (BI).

H1a : The correlation between performance expectancy (PE) and behavioral intention (BI) are moderated by age.

H1b : The correlation between performance expectancy (PE) and behavioral intention (BI) are moderated by gender.

H2 : There is a correlation between effort expectancy (EE) and behavioral intention (BI).

H2a : The correlation between effort expectancy (EE) and behavioral intentions are moderated by age (BI).

H2b: The correlation between effort expectancy (EE) and behavioral intention (BI) are moderated by gender.

H3: There is a correlation between social influence (SI) and behavioral intention (BI).

H3a: The correlation between social influence (SI) and behavioral intentions (BI) are moderated by age.

H3b: The correlation between social influence (SI) and behavioral intentions (BI) are moderated by gender.

H4: There is a correlation between facilitating conditions (FC) and use behavior (UB).

H5: There is a correlation between behavioural intention (BI) and the use of behavior (UB).

### Conclusion Withdrawal

The final stage of this study is the withdrawal of conclusions. The conclusions obtained in this study are based on the results of statistical tests compared to theories.

### Result and Discussion

It is known that the percentage of women is more than men, the number of female respondents as much as 58.6% while male respondents as much as 41.4%. The age of the respondents was 30 years and above (58.6%) while those aged less than 30 years were 41.4%. D3 educated respondents amounted to 41.4%, D4 or S1 educated as much as 35.7% and the remaining 22.9% of high school educated respondents

### Outer Model Testing

The instrument is valid if it has an outer loading value above 0.5 (Chin, Marcolin and Newsted, 1996) and an AVE value above 0.5 (Ghozali, 2014). The results of the study in table 1 show all the outer loading values of each indicator above 0.5. Each variable in table 1 shows that the AVE value is not below 0.5 which means that all indicators are valid. Thus, no indicators are excluded from the research model.

Table 2 shows the composite reliability values and Cronbach's alpha values used in reliability testing. Variables are said to be reliable if they have a composite reliability value and a cronbach alpha value of more than 0.7 (Ghozali, 2014). The test results reveal that all study variables have values above the standard, indicating that they are all trustworthy.

### Inner Model Testing

Sarstedt mentioned that the value of R-square is classified into three, namely 0.75 (strong), 0.55 (moderate) and 0.25 (weak) (Sarstedt, Ringle and Hair, 2017). The behavioural intention (BI) and Use of Behaviour (UB) variables are included in the moderate category since their R-square value is less than 0.75, as seen in figure 3. The behavioural intention (BI) variable and the facilitating conditions can explain 68.6% of the use of behavior (UB) variable, and the behavioural intention (BI) variable can be described by performance expectancy (PE), effort expectancy (EE), and social influence (SI) variables by 70%.

Table 1. Convergent Validity Test Results

Variable	Indicators	Statement	Outer Loading	AVE
PE	PE1	MRMIS makes work easier	0.859	0.686
	PE2	MRMIS increases productivity	0.837	
	PE3	MRMIS improves performance	0.783	
	PE4	MRMIS is useful for getting my work done	0.865	
	PE5	MRMIS accelerates the completion of work	0.794	
EE	EE1	MRMIS is easy to use	0.747	0.609
	EE2	Easy-to-run system features	0.827	
	EE3	Information systems make it easier to get some work done more effectively.	0.817	

Variable	Indicators	Statement	Outer Loading	AVE
SI	EE4	MRMIS makes it easy to complete multiple jobs at a time	0.704	0.647
	EE5	MRMIS is easy to learn its use	0.801	
	SI 1	MRMIS is used because hospital management expects it	0.703	
	SI 2	MRMIS is used because someone helps to use	0.769	
	SI 3	MRMIS is used because the boss supports	0.745	
FC	SI 4	Someone thinks MRMIS can make my job easier	0.877	0.539
	SI 5	Someone believes, I have to use MRMIS in work	0.880	
	SI 6	Management motivates to use MRMIS	0.835	
	FC1	MRMIS is used because it already has IT capabilities	0.774	
	FC2	There is training in the use of MRMIS	0.734	
	FC3	There are facilities and infrastructure to use MRMIS	0.776	
	FC4	Using MRMIS because there is an opportunity to use it	0.679	
BI	FC5	MRMIS is used because there is help when difficulty using MRMIS	0.687	0.538
	FC6	MRMIS is used because it has functions that are in accordance with the needs of work activities	0.750	
	BI1	MRMIS will continue to be used.	0.725	
	BI2	MRMIS is used out of self-desire.	0.769	
UB	BI3	MRMIS will be used in the next few months	0.58	0.626
	BI4	I intend to continue using MRMIS	0.834	
	UB1	Using MRMIS is a good idea	0.834	
	UB2	MRMIS makes work more interesting	0.828	
	UB3	Using MRMIS is fun	0.839	
	UB4	Most of the work is done with MRMIS.	0.616	
	UB5	I actually use MRMIS to get the job done.	0.815	

Table 2: Cronbach's alpha and Composite reliability

Variable	Composite reliability	Cronbach's alpha
PE	0.916	0.885
EE	0.886	0.841
SI	0.916	0.891
FC	0.875	0.832
BI	0.821	0.719
UB	0.892	0.848



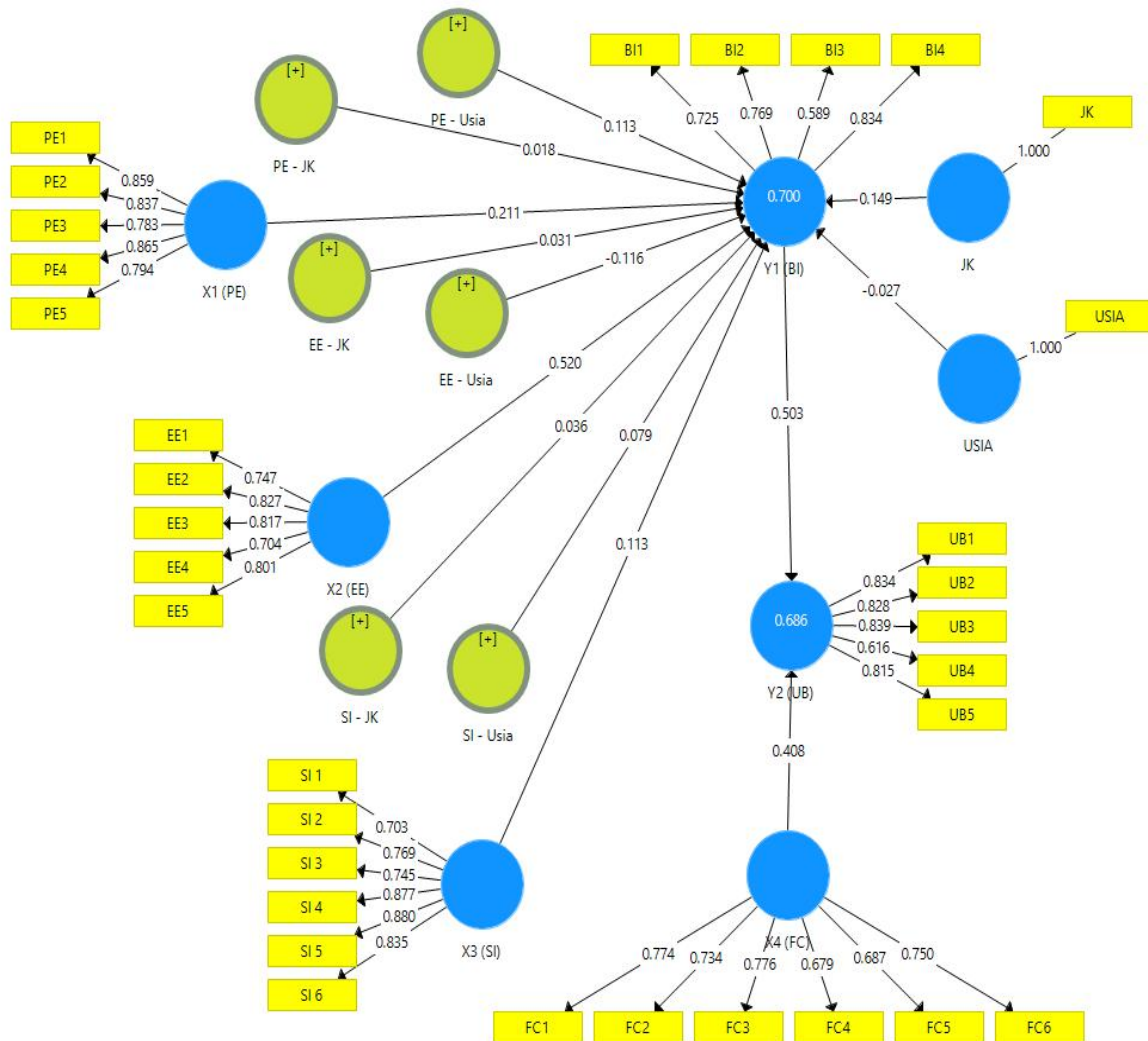


Figure 3. Research Model Flowchart (outer loading, R-Square and original sample values)

Table 3. Path Coefficient and t-Statistical Values

Path Diagram	Original Sample	t-Statistics	Information
PE → BI	0.211	0.903	H1 rejected
PE – Usia → BI	0.113	0.421	H1a rejected
PE – JK → BI	0.018	0.063	H1b rejected
EE → BI	0.520	2.507	H2 accepted
EE – Usia → BI	-0.116	0.366	H2a rejected
EE – JK → BI	0.031	0.125	H2b rejected
SI → BI	0.113	0.514	H3 rejected
SI – Usia → BI	0.079	0.250	H3a rejected
SI – JK → BI	0.036	0.153	H3b rejected
FC → UB	0.408	3.787	H4 accepted
BI → UB	0.503	4.928	H5 accepted

## Hypothesis Testing

Through table 3, it is known that the variable effort expectancy has an effect and significant to the variable behavioural intention, the results of hypothesis testing in this study are the same as the results of research conducted by Venkatesh and Butarbutar which states that the variable effort expectancy has an effect and significant on behavioural intention (Venkatesh, 2003) (Butarbutar and Haryanto, 2017). The positive and significant relationship between the variable effort expectancy to behavioural intention shows that the MRMIS applied has features that are able to provide convenience to the medical record officer of the X Hospital in Mataram City so that officers have the desire to use MRMIS continuously.

Another variable that shows a significant relationship between variables is the relationship between variable facilitating conditions to use behaviour variables, the test results are supported by similar research conducted by Putri which states that the variable facilitating conditions have a positive and significant influence of use behaviour variables (Putri and Mahendra, 2017). The results of this study mean that medical record officers feel the working environment conditions and facilities of facilities and infrastructure when MRMIS is applied can support it to use MRMIS continuously. The next variable that has a significant relationship is the relationship between behavioural intention variables to use behaviour, the results of Gao's research showed that behavioural intention variables have an influence on use behaviour variables where in the study known t-test value of 3.61 and correlation coefficient value of 0.516 (Gao and Shao, 2018). The results of the test of a significant relationship between variable behavioural intention and use behaviour prove that MRMIS can improve the performance of medical record officers so that officers will often use MRMIS.

Based on the results of the hypothesis test in table 3, it is also known that the relationship between performance expectancy variables is not significant to behavioural intention variables, the test

results are not in accordance with the research conducted by Venkatesh (2003) namely performance expectancy significant to behavioural intentions, but the results of research conducted in accordance with research conducted by Sutanto and Alawadhi Performance expectancy variables are not significant to behavioural intentions (Sutanto, Ghazali and Handayani, 2018) (Alawadhi and Morris, 2008). The results of this test mean that medical record personnel are not sure that the application of MRMIS can improve their performance, then the relationship between social influence variables to behavioural intentions shows an insignificant relationship. The results of this study are in accordance with research conducted by Wibowo and Nurus Sa'idah which stated that social influence is not significant to behavioural intention variables (Wibowo, Mursityo and Herlambang, 2019) (Nurus Sa'idah, 2017). The results of this test showed that the medical record officer felt unsure that people in his work environment such as management, superiors and co-workers supported him to use MRMIS.

Furthermore, statistical tests in this study showed that age and gender moderation variables could not moderate the relationship between variables such as performance expectancy variables to behavioural intentions, the results of this study were in accordance with research conducted by Gahtani and Rianadewi which stated that performance expectancy variables against behavioural intention variables cannot be moderated by age and gender (Al-Gahtani, Hubona and Wang, 2007) (Rianadewi, Hendra Divayana and Pradnyana, 2019), then the age moderation variable cannot moderate the relationship between the variable effort expectancy to behavioural intention, the results of the test supported by previous research that mentioned that the variable of age moderation does not significantly moderate the variable expectancy to the variable of expectancy (Maita *et al.*, 2018) and other research conducted by Andrianto stated that the moderating variable gender did not moderate the relationship between effort expectancy and behavioural intention

(Andriyanto, Baridwan and Subekti, 2019), then the test results show that The results of the tests show that the moderating variables of age and gender cannot moderate the relationship between social influence and behavioural intention. This is supported by Huzaemi's research, which found that the age moderating variable does not moderate the relationship between social influence and behavioural intention (Huzaemi and Atin, 2018), as well as research conducted by Rianadewi which states that the variable of gender moderation does not moderates the relationship between social influence variables to behavioural influence variables (Rianadewi, Hendra Divayana and Pradnyana, 2019). Based on the results of the test it can be known that the variables of moderation of age and gender were not able to affect the relationship between the variables in this study, this can be caused by the age range of respondents in this study is not too varied and in this study the comparison between the sexes of men and women whose numbers are not too different.

## Conclusion

The conclusion of this study is that the variables that affect MRMIS acceptance in X hospital Mataram City are effort expectancy variables where the value of t-statistics is 2,507, facilitating conditions have a t-statistical value of 3,787 and behavioural intentions that have a t-statistical value of 4,928. While performance expectancy variables, social influence showed insignificant results, and the existence of age and gender moderation variables could not moderate the relationship between variables where the resulting value was not significant, so based on the hypothesis made only the hypotheses H2, H4 and H5 are acceptable, while the hypotheses H1, H2a, H2b, H3, H3a, H3b are rejected, therefore the results of this study can be used as one of the hospital considerations for Optimizing the implementation of MRMIS and for future research is expected to add variables that are not used in this study and can also use

the wider population to obtain more varied data analysis results.

## Abbreviations

PE: Performance Expectancy; EE: Effort Expectancy; SI: Social Influence; BI: Behavioral Intention; UB: Use of Behavior; PE: Performance Expectancy; EE: Effort Expectancy; SI: Social Influence Facilitating Conditions (FC)

## Declarations

### Ethics Approval and Consent Participant

This study has obtained ethical eligibility with ethical number 1292/UN25.8/KEPK/DL/2021 from the Health Research Ethics Committee of the Faculty of Dentistry, Jember University.

### Conflict of Interest

The writers state that they have no personal interests that may have influenced their work.

### Availability of Data and Materials

Not applicable

### Authors' Contribution

The manuscript was written, reviewed, and edited by NKP.

### Acknowledgment

We would like to express our gratitude to Diponegoro University's Faculty of Public Health for their technical assistance, as well as all of the participants in this study.

## References

- Al-Gahtani, S. S., Hubona, G. S. and Wang, J. (2007) 'Information technology (IT) in Saudi Arabia: Culture and the acceptance and use of IT', *Information and Management*, 44(8), pp. 681–691. doi: <https://doi.org/10.1016/j.im.2007.09.002>.
- Alawadhi, S. and Morris, A. (2008) 'The use of the UTAUT model in the adoption of e-government services in Kuwait', *Proceedings of the Annual Hawaii*



- International Conference on System Sciences*, (January). doi: <https://doi.org/10.1109/HICSS.2008.452>.
- Andriyanto, D., Baridwan, Z. and Subekti, I. (2019) 'Determinan penggunaan sistem akuntansi pemerintah desa: Analisis berperilaku menggunakan UTAUT', *Jurnal Ekonomi dan Bisnis*, 22(2), pp. 313–344. doi: <https://doi.org/10.24914/jeb.v22i2.2459>.
- Azwar, S. (2010) *Metode Penelitian*. Yogyakarta: Pustaka Pelajar.
- Butarbutar, F. T. S. and Haryanto, Y. (2017) 'Kajian Signifikansi Faktor Yang Mempengaruhi Penggunaan e-Learning Pada Siswa SMK Global Informatika Tangerang', *Jurnal RESTI (Rekayasa Sistem dan Teknologi Informasi)*, 1(1), pp. 9–18. doi: <https://doi.org/10.29207/resti.v1i1.13>.
- Chin, W., Marcolin, B. and Newsted, P. (1996) 'a Partial Least Squares Latent Variable Modeling Approach for Measuring Interaction Effects: Results From a Monte Carlo Simulation Study and Voice Mail Emotion / Adoption Study'. doi: <https://doi.org/10.1287/isre.14.2.189.16018>.
- Creswell, J. W. (2018) *Third Edition Research Design Qualitative, Quantitative, and Mixed Methods Approaches*. Available at: <http://www.drbrambedkarcollege.ac.in/sites/default/files/research-design-ceil.pdf>.
- Gao, K. and Shao, X. (2018) 'Adoption Research of the M-commerce Application Based on the Perspective of Supply Chain Management in Shipping Industry', *Journal of Coastal Research*, 83(83), pp. 839–845. doi: <https://doi.org/10.2112/S183-138.1>.
- Ghozali, I. (2014) *Structural Equation Modeling, Metode Alternatif dengan Partial Least Square (PLS)*, Edisi 4. Semarang: Badan Penerbit Universitas Diponegoro.
- Huzaemi, A. and Atin, S. (2018) 'Pemanfaatan Model Utaut Untuk Menganalisis Perilaku Pengguna Pada Sistem E-Ticket Pt.X', *Komputa: Jurnal Ilmiah Komputer dan Informatika*, 7(2), pp. 51–58. doi: <https://doi.org/10.34010/komputa.v7i2.3037>.
- Maita, I. et al. (2018) 'User behavior analysis in academic information system using unified theory of acceptance and use of technology (UTAUT)', *ACM International Conference Proceeding Series*, pp. 223–228. doi: <https://doi.org/10.1145/3230348.3230351>.
- Nurus Sa'idah (2017) 'Analisis Penggunaan Sistem Pendaftaran Online (E-Health) Berdasarkan Unified Theory Of Acceptance And Use Of Technology (UTAUT)', 5, pp. 1–23. doi: <http://dx.doi.org/10.20473/jaki.v5i1.2017.72-81>.
- Putra, A. D. (2020) 'Evaluasi Sistem Informasi manajemen Rumah Sakit (SIMRS) Dengan Metode Hot Fit Di RSUD Andi Makkasau Kota Parepare', *Jurnal Ilmiah Manusia dan Kesehatan*, 1(1), pp. 61–68. Available at: <http://umpar.ac.id/jurnal/index.php/makes/article/view/294>.
- Putri, L. F. S. and Mahendra, I. (2017) 'Analisa Faktor-Faktor Yang Mempengaruhi Penerimaan Dan Penggunaan Aplikasi Go-Jek Menggunakan Unified Theory of Acceptance and Use of Technology (UTAUT)', *Jurnal Pilar Nusa Mandiri*, 13(1), pp. 136–144. doi: <https://doi.org/10.33480/PILAR.V13I1.157>.
- Rianadewi, N., Hendra Divayana, D. G. and Pradnyana, I. M. A. (2019) 'Analisis Penerimaan Pengguna Sistem Informasi Perpustakaan Dan Arsip Daerah Kabupaten Buleleng Menggunakan Model Unified Theory of Acceptance and Use of Technology (Utaut)', *Kumpulan Artikel Mahasiswa Pendidikan Teknik Informatika (KARMAPATI)*, 8(2), p. 394. doi: <http://dx.doi.org/10.23887/karmapati.v8i2.18391>.

- Sarstedt, M., Ringle, C. M. and Hair, J. F. (2017) 'Partial least squares structural equation modeling.' *Handbook of market research, Handbook of Market Research*. doi: [http://dx.doi.org/10.1007/978-3-319-05542-8\\_15-1](http://dx.doi.org/10.1007/978-3-319-05542-8_15-1).
- Sutanto, S., Ghozali, I. and Handayani, R. S. (2018) 'Faktor-Faktor Yang Memengaruhi Penerimaan Dan Penggunaan Sistem Informasi Pengelolaan Keuangan Daerah (Sipkd) Dalam Perspektif the Unified Theory of Acceptance and Use of Technology 2 (Utaut 2) Di Kabupaten Semarang', *Jurnal Akuntansi Dan Auditing*, 15(1), p. 37. doi: <https://doi.org/10.14710/jaa.15.1.37-68>.
- Venkatesh, V. (2003) 'User Acceptance Of Information Technology: Toward A Unified View', *International Encyclopedia of Ergonomics and Human Factors, Second Edition - 3 Volume Set*, 27(3), pp. 425–478. doi: <https://doi.org/10.2307/30036540>.
- Wibowo, A. H., Mursityo, Y. T. and Herlambang, A. D. (2019) 'Pengaruh Performance Expectancy, Effort Expectancy, dan Social Influence Terhadap Behavioral Intention dalam Implementasi Aplikasi SIMPG PT Perkebunan Nusantara XI Surabaya', *Jurnal Pembangunan Perkotaan*, 3(9), pp. 9047–9053. Available at: <https://j-ptiik.ub.ac.id/index.php/j-ptiik/article/view/6338>.