PAPER NAME

11. MTI-60181103-Tugiman2.pdf

AUTHOR

Tugiman Tugiman

WORD COUNT

5847 Words

CHARACTER COUNT

30857 Characters

PAGE COUNT

12 Pages

FILE SIZE

705.2KB

SUBMISSION DATE

Apr 4, 2023 12:44 PM GMT+7

REPORT DATE

Apr 4, 2023 12:45 PM GMT+7

21% Overall Similarity

The combined total of all matches, including overlapping sources, for each database.

- 15% Internet database
- 16% Publications database
- Crossref database
- Crossref Posted Content database
- 0% Submitted Works database

Excluded from Similarity Report

- Bibliographic material
- Quoted material
- Cited material
- Manually excluded sources

Matrik: Jurnal Manajemen, Teknik Informatika, dan Rekayasa Komputer
Vol. 22, No. 2, Maret 2023, pp. 381∼392
ISSN: 2476-9843, accredited by Kemenristekdikti, Decree No: 200/M/KPT/2020
DOI: 10.30812/matrik.v22i2.2844

The UTAUT Model for Measuring Acceptance of the Application of the Patient Registration System

Tugiman , Herman , Anton Yudhana
Universitas Ahmad Dahlan, Yogyakarta, Indonesia

Article Info

Article history:

Received December 31, 2022
Revised February 20, 2023
Accepted March 29, 2023

Keywords:

Hospital
Patient Registration System
User Acceptance
UTAUT

ABSTRACT

The Covid-19 pandemic forced hospitals to innovate so that services comply with health protocols in the new adaptation period. The Muhammadiyah Community Welfare Development Hospital (PKU) is no exception, which finally tried to implement the Online Registration System (SIPENDOL). SIPENDOL was implemented in May 2020 after experiencing several problems in patient registration management. One of the problems arising from the manual registration system is the accumulation of registrants in the registration room due to the limited number of service personnel. Another problem was that registrants were not served in order due to missing registry files. Therefore, electronic Health (E-Health), such as online patient registration, is expected to be a solution for hospitals, especially when patient visits are high. The purpose of this study was to analyze the level of user acceptance and the factors that influence the implementation of the online patient registration system for hospital patients. The implementation involved measurement using the Unified Theory of Acceptance and the Use of Technology and analysis using the Structural Equation Model method using smart-PLS. The measurement used six constructs: performance expectancy, effort expectancy, social influence, facilitation condition, behavioral intention, and user behavior. The research results showed that all hypotheses construct formed to show a valid value, with the value of each construct being 2.031, 2.089, 3.483, 1.969, 2.877, 2.577. So it can be said that users have well received the application of SIPENDOL in hospitals.

Corresponding Author:

Tugiman, +6281328749111,
Master of Informatics,
Universitas Ahmad Dahlan, Yogyakarta, Indonesia.
Email: tugiman2007048001@webmail.uad.ac.id

How to Cite:T. Tugiman, H. Herman, and A. Yudhana, "The UTAUT Model for Measuring Acceptance of the Application of the Patient Registration System", *MATRIK : Jurnal Manajemen, Teknik Informatika dan Rekayasa Komputer*, vol. 22, no. 2, pp. 299-310, Mar. 2023.

1. INTRODUCTION

In the 1945 Republic of Indonesia Law, it is written that healthcare is a right for everyone. This statement is something that must be realized because it is part of an effort to improve the health status of the Indonesian people to the highest level [1]. One of the biggest hospitals in Kebumen Regency is the Peoples Welfare Development Hospital (PKU) Muhammadiyah Gombong also seeks to improve services for patients convenience. Even more so during Covid-19, when the number of patients increased compared to normal times. Medical record data at the PKU Muhammadiyah Gombong Hospital show that the number of outpatients in October 2019 was 12,516, averaging 464 patients/day. This ultimately causes queue density at the registration section due to the limited number of service personnel. In addition to the limited number of service personnel, queues also occur due to the registration system, which still requires patients to fill out forms directly at the registration section.

In May 2020, the hospital decided to implement an online registration system called SIPENDOL. This system was developed using Flutter based on the Android system. The existence of this system is expected to facilitate patients and service personnel in registering services. With this application, patients no longer need to queue to register, patients can independently register themselves or the patients family, and the system will provide information on the results of the reservation and the time of arrival of the patient to the hospital so that the patient will be served optimally because the arrival time will be shorter regular.

For these goals to be achieved, the implementation of a system must be successful and well-received by users. However, it is known that there is a possibility that the implementation of an information system may fail to be accepted and not be used by the user as it should. Therefore, to ensure that the hospitals expectations are met with the implementation of this system, it is necessary to measure user acceptance directly. This measurement aims to determine how good user acceptance is in using this online registration system. In addition, this measurement is also expected to find out what factors are still not acceptable to the user. After knowing what factors are not acceptable to the user, the application developer can make system improvements according to these factors.

Various factors can influence the acceptance of the implementation of a system. One method that can be used to measure the acceptance of a systems application is the Unified Theory of Acceptance and Use of Technology (UTAUT). There are six constructs that can be used in the UTAUT model, including performance expectancy, effort expectancy, social influence, facilitating condition, behavioral intention, and use behavior [2].

Several previous similar studies were done by Astani [3], which analyzed online registration systems (E-Health) usage based on UTAUT at dr. M. Soewandhi Surabaya.The results showed that performance expectations ($p = 0.044$) significantly affected behavioral intentions. In contrast, effort expectations ($p = 0.982$) and social influence ($p = 0.124$) did not significantly affect behavioral intentions in using the E-Health system. Furthermore, other studies use similar models such as research Afiana, Sunarkah, and Hidayat [1] conducted research comparing the Technology Acceptance Model (TAM) and UTAUT2 methods to measure the success of implementing a Hospital Management Information System at Wijaya Kusuma Hospital DKT Purwokerto. The results showed that measurements using the UTAUT2 method proved to be better than those using the TAM method. Furthermore, research by Astuti, Adi, and Suryoputro [4] regarding the analysis of acceptance of the online registration system of Puskesmas using TAM2 and UTAUT in the four Semarang City Health Centers shows that the model UTAUT2 can predict 76.5% perception of benefits and 28.3% intention to use, while the UTAUT model was able to predict 41.6% intention to use this system. Meanwhile, Henny conducted research [5] regarding a comparative analysis of the TAM and UTAUT methods in evaluating user acceptance of the e-filling on tax compliance. The TAM method can be seen in the perceived usefulness construct of 63%. In contrast, user acceptance of the system in the UTAUT method can be seen in the behavioral intention construct of 73%. From these results, it can be concluded that the UTAUT method is the best method used in this study because the UTAUT method is able to measure as much as 73% of the aspects that can be used to assess system acceptance of users and the TAM method is only able to measure as much as 63%.

The difference between this research and similar research lies in the object studied. In this study, the system is examined, more specifically, online registration. In addition, the number of constructs used in previous studies was less than in this study. Another difference is in analyzing data from respondents. The software used is more recent, namely using Smart-PLS.

Based on the description above, a measurement study was carried out using new technology, such as an online registration system using the UTAUT model. This study is divided into four main parts: introduction, research methods, results and analysis, and conclusions. This section describes the background of the problem, research gaps, and research objectives. The solution to the research problem is to measure the system using the UTAUT method, which in its stages applies the Structural Equation Modeling stages presented in the second part. The third section presents an analysis of the results and discussion of this study. At the same time the last part is the conclusion.

2. RESEARCH METHOD

2.1. Unified Theory of Acceptance and Use of Technology (UTAUT)

The method in this study uses a descriptive quantitative approach. This research begins with determining the method of selecting a questionnaire, then determines the population and research sample, and continues with data processing. The population in this study were all users of the SIPENDOL application at PKU Muhammadiyah Gombong Hospital. Sampling in this study uses an accidental sampling method. A total of 200 people participated in this study.

The data collection process uses a Google form distributed to SIPENDOL users based on the number of mobile contacts listed when they did the online registration. The questionnaire used in this study was prepared according to the UTAUT model modification. This model has been adapted to the needs of research considering the possibility that the form filler is not a direct patient, thereby minimizing the invalidity of the data provided. So this research model does not use age, gender, and experience using the system as moderators for analysis. The research model in this study is shown in Figure 1. The questionnaire consists of 14 question items or indicators, divided into six variables: performance expectancy, effort expectancy, social influence, facilitating condition, behavioral intention, and use behavior [4]. The data scale used in this study is a Likert scale. The Likert scale consists of five alternative answers. Each alternative answer is scored based on the answer category on the research questionnaire [6].

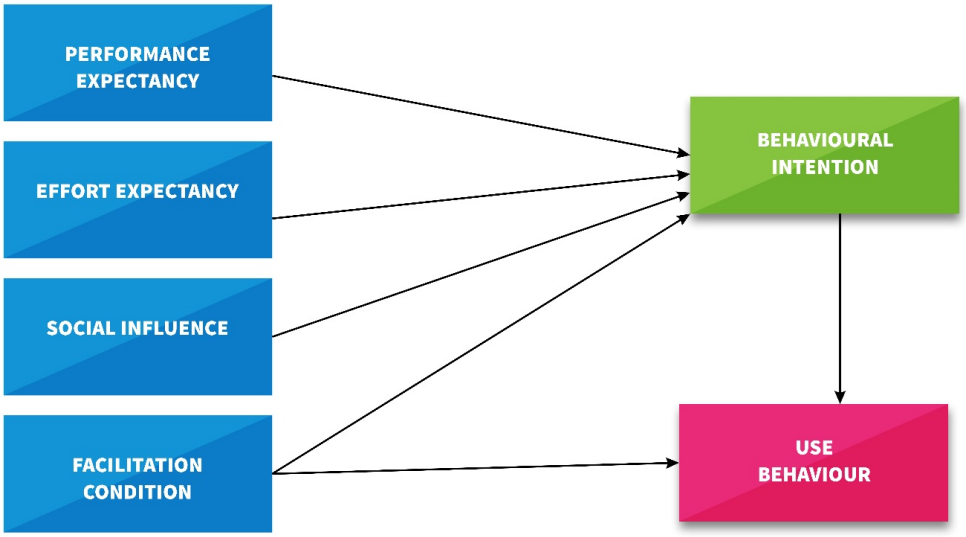

Figure 1. UTAUT Model Modification

Performance expectancy is the level of expectation that each individual has that using the system can improve performance at work. SI is defined as the degree to which a person feels the importance that others believe will influence using the new system. Effort Expectancy is defined as user convenience in using the system. The facilitation Condition represents the extent to which a person believes that the technical and organizational infrastructure is in place to support the system. Finally, behavioral intention is the behavior of using technology in the long term, the ability of an application to provide benefits to its users and foster satisfaction for its users so that they want to convey positive things to others and recommend the application to other users and continue to use the app.

A similar study was conducted by Badra [7] by analyzing the implementation of the Mobile Hospital Application at a hospital with a total of 148 respondents. Analysis was done using SPSS software and using six constructs. From the analysis results, it is known that performance expectancy, effort expectancy, social influence, and facilitating condition constructs impact behavioral intention. The behavioral intention constructs have an impact and influence on the use of behavioral while facilitating does not have a great impact and influence on the use of behavioral constructs. Other studies that also use the six constructs are Ismarmiaty and Adam [8], Ismarmiaty [9], and Afiana [1]. Based on this research and the basic model from Raza [10], a hypothesis was developed like following:

H1: Performance expectancy has a large impact and influence on Behavioral intention

H2: Effort expectancy has a major impact and influence on Behavioral intention

H3: Social influence has a major impact and influence on Behavioral intention

H4: Facilitation Condition has a large impact and influence on Behavioral intention

H5: Facilitation Condition has a big impact and influence on Use Behavioural

H6: Behavioral intention has a big impact and influence on Use Behavioural

Furthermore, data analysis and testing in this study used Structural Equation Modeling (SEM). SEM testing consists of two parts, namely the measurement test, or outer model, and the indicator model test, or inner model. The model was tested using Smart-PLS software (Version 3.3.3) using research questionnaire respondent data that had been collected.

2.2. Structural Equation Modeling (SEM)

SEM is a technique developed to analyze many variables so that the limitations of analytical models used in the past are covered, and this technique has also been used in many statistical studies. The advantages of SEM in research include, Can test the relationship of causality, validity, and reliability as well, Can be used to see the direct and indirect effects between variables, Testing several dependent variables at once with several independent variables, Can measure how much the indicator variables affect each factor variable, Can measure factor variables that cannot be measured directly through indicator variables.

SEM modeling steps start from developing theoretical models, developing path diagrams, converting flowcharts into SEM equations, selecting input matrices and estimation techniques, assessing problem identification, model evaluation to interpretation, and model modification [11].

The analysis phase begins by forming an initial model of each method using the adapted construct. After that, enter the Outer Model testing phase first, namely testing the convergent validity of each construct indicator. The validity test is useful so that all research indicators that measure research variables that have been distributed are valid or not. In SmartPLS, convergent validity is seen through the results of the loading factor of all indicators in related constructs. If the standard correlation coefficient value is 0.5 or more, then the data is declared valid. If all indicators of each construct are valid, then proceed with the second phase of Outer Model testing, namely the Discriminant Validity Test.

Discriminant Validity Test is reviewed through the indicator value of the Fornell-Larcker Criterion. A construct is said to be valid if the calculated value indicated by the correlation value between one construct and another is smaller than the Fornell-Larcker Criterion of each construct. If the test results show an invalid value, the test model must be changed again and tested from the beginning, namely convergent validity testing.

The final testing phase of the Outer model is the Reliability Test. This testing phase is carried out to see a research instruments reliability or consistency level. Cronbachs Alpha and composite reliability can be used to test the reliability of the instrument. The reliability test is declared valid if it produces a Cronbachs Alpha of 0.6 and a composite reliability of 0.7. In this study, the test was carried out with one measurement or one-shot [12].

After testing the Outer model is valid, then testing the Inner model can be done. This analysis is carried out so that the structural model created is strong and accurate. The inner model stages test the significance of the effect of each variable by looking at the t-statistical value [13]. The research prediction model is said to be good if the r-square value is high. The path coefficient results represent the significance level at the hypothesis testing stage. The analysis results at this stage are used to review the effect of the independent variables on the dependent variable.

Still, in the Inner Model Test, the next test is Hypothesis Testing. At this stage, the focus is on the magnitude of the T-statistic value using a significance level of 95%. The T-table result with this figure is 1.96. If the results of the T-table are in the range of -1.96 to 1.96, then the hypothesis is rejected or said to be invalid [14]. In Smart-PLS, a bootstrap feature can be used to get t values and path coefficients. The test steps can be presented in a flowchart in Figure 2.

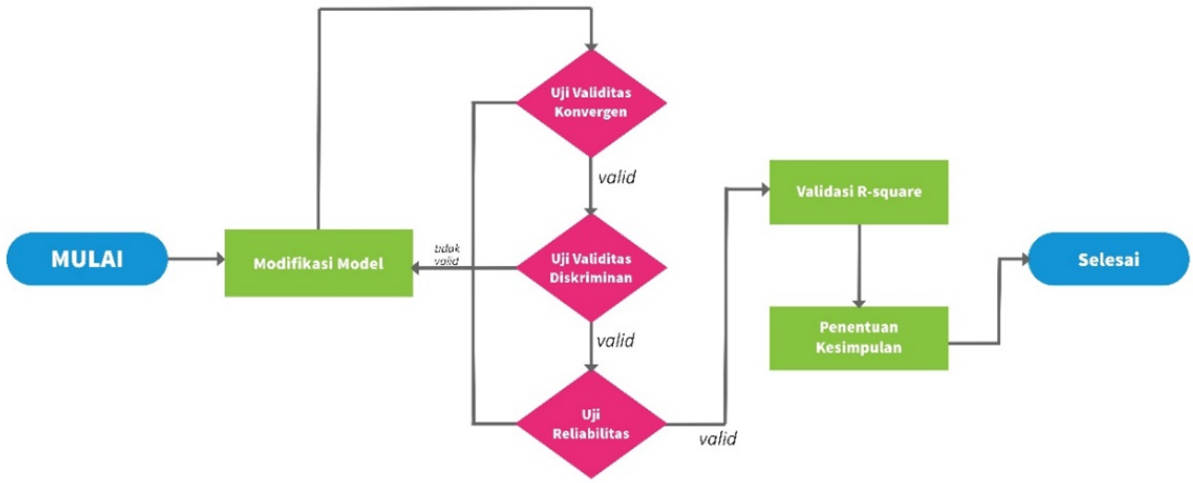

Figure 2. Step-by-Step Test Analysis

There are several ways to use SEM analysis. The first way is based on Covariance SEM (CB-SEM), which is generally done by adopting software packages such as Lisrel, EQS, AMOS, and Mplus. Another way is Partial Least Squares (PLS), which targets analysis of variance and can be done using Visual PLS, PLS-Graph, and SmartPLS. In this study, Smart PLS is the choice for analyzing the data to be studied.

3. RESULT AND ANALYSIS

3.1. Respondent Demographic Analysis

After successfully determining the research model to be used and forming a hypothesis, the next step is to create a UTAUT model questionnaire. The questionnaire was based on the number of constructs used, references from similar studies, and the UTAUT model maker. For example, Abayomi has conducted research using the UTAUT model to measure the application of medical equipment information systems in South Africa [15]. In addition, Rahi has measured the implementation of the internet banking system [16]. Simatupang conducted the latest research in 2022 to measure the implementation of the Hospital Information System at Budi Kemuliaan Hospital Batam [17]. The similarity of this research with the research previously mentioned is the method used in measuring the application of technology. Based on these studies, a complete questionnaire of the UTAUT model was finally compiled for this research in Table 1.

Table 1. UTAUT Questionnaire Items

Construct	Code	Question
Performance Expectancy	PE01	- The SIPENDOL application is very useful as an outpatient online registration system
	PE02	- I feel satisfied using the SIPENDOL application
	PE03	- In my opinion, registering through SIPENDOL saves more time than queuing when registering manually
	PE04	- Online patient registration using SIPENDOL is very effective
Effort expectancy	EE01	- Using SIPENDOL makes it easier for me to plan visits to polyclinic doctors
	EE02	- The SIPENDOL operating system is easy to understand
	EE03	- The SIPENDOL application is easy for me to learn
	EE04	- The registration service using SIPENDOL is faster than the manual registration service
Facilitating Condition	FC01	- The physical appearance of the SIPENDOL machine in the hospital is good and attractive
	FC02	- The internet connection on the SIPENDOL RS machine is fast and smooth
	FC03	- The menu display on the SIPENDOL RS machine is clear and easy to understand
	FC04	- Printing queue numbers through the SIPENDOL machine is fast and smooth
Behavioral Intention	BI01	- I use SIPENDOL because I see other people using it too
	BI02	- I use SIPENDOL because other people and hospital staff told me to
	BI03	- I believe other people or hospital staff will help me if I have difficulty using SIPENDOL [18]

The next step is to distribute the questionnaires that have been formed to the respondents. Respondents in this study were SIPENDOL users who had created accounts and included their cell phone numbers. The demographic analysis results of respondents using the SIPENDOL application are in Table 2.

Table 2. Respondent Demographics

Characteristics	Item	Total	Percentage
Gender	Male	103	51,5%
	Female	97	48,5%
Age	<20	37	18,5%
	21-35	74	37%
	36-50	45	22,5%
	>40	44	22%
Educational level	Junior High School	68	34%
	Senior High School	42	21%
	Diploma	35	17,5%
	Bachelor	55	27,5%
Profession	Civil servant	9	4,5%
	Private employee	28	14%
	Housewife	33	16,5%
	Entrepreneur	45	22,5%
	unemployed	85	42,5%

Based on Table 2, it is known that the respondents were dominated by males with an age group in the range of 21 to 35 years with a Junior High Schools degree at the end of education. All respondents will be given a questionnaire via a link sent to the number of respondents via WhatsApp or SMS, which will go to the questionnaire form on a Google form.

3.2. Convergent Validity Testing

The validity test is carried out so that all research indicators that measure the research variables that have been distributed are valid or not. In PLS, convergent validity is seen through the results of factor loading of all indicators in the construct concerned. If the standard correlation coefficient value is 0.5 or more, then the data is declared valid [19].

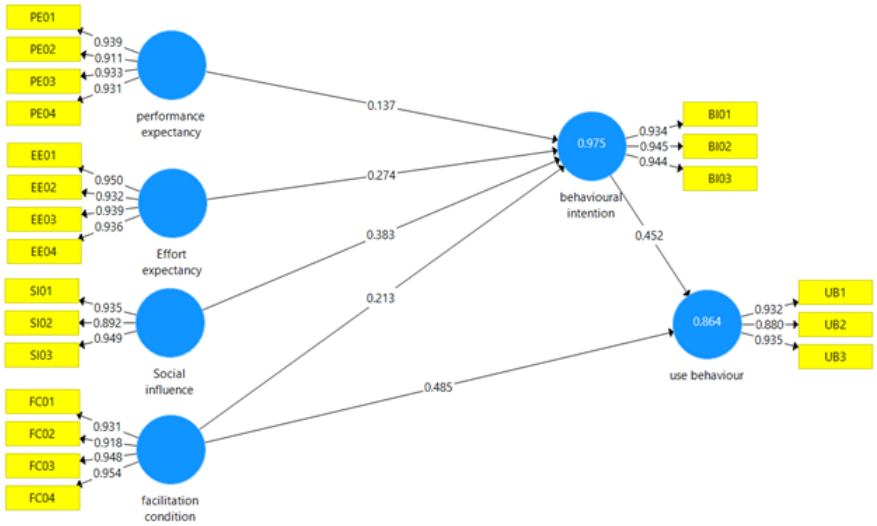

Figure 3. Loading Factor UTAUT Model

Based on Figure 3, it is known that all construct values of each instrument in each construct are worth more than the minimum standard value of the coefficient. From these values, it can be stated that this constructed model is valid, and the analysis can be continued to the next stage. The next test is each constructs value test Average Variance Extracted (AVE). The construct value is declared valid if the AVE value is more than 0.5. The results of the analysis of the AVE value of this model are in Table 3.

Table 3. AVE value of the UTAUT Model

Construct	AVE	Result
Behavioral Intention	0,886	Valid
Effort Expectancy	0,883	Valid
Facilitating Condition	0,880	Valid
Performance Expectancy	0,862	Valid
Social Influence	0,857	Valid
Use Behavior	0,839	Valid

Table 3 shows the AVE value of each construct in the UTAUT Model, namely performance expectancy, effort expectancy, social influence, facilitating condition, behavioral intention, and use behavior having an AVE value of more than 0.5. So at this step, it can be concluded that all the constructs used in this study are valid.

3.3. Discriminant Validity Testing

If the convergent validity is valid, the next step is to test the discriminant validity. Discriminant Validity testing is reviewed through the value of the Fornell-Larcker criterion indicator. It is said to be valid if the calculated value indicated by the correlation value between one construct and another is smaller than the Fornell-Larcker Criterion for each construct [8]. The results of the discriminant validity analysis of the two methods are in Table 4.

Table 4. Discriminant Validity of the UTAUT Model

Construct	EE	SI	BI	FC	PE	UB
Effort Expectancy	0,939					
Social Influence	0,924	0,926				
Behavioral Intention	0,868	0,873	0,941			
Facilitating Condition	0,906	0,905	0,868	0,938		
Performance Expectancy	0,929	0,908	0,919	0,929	0,929	
Use behavior	0,899	0,912	0,921	0,923	0,898	0,916

The value of the analysis is declared valid if the correlation value between the construct to the construct itself must be higher than the value of the relationship between the construct and other constructs. Based on the value in Table 4, all constructs in this model can be declared valid and can be continued to the next analysis stage.

3.4. Reliability Test

The reliability test is the third stage after the discriminant validity of all valid constructs. This testing phase is carried out to see a research instruments reliability or consistency level. Cronbachs Alpha and composite reliability can be used to test the instruments reliability. Reliability testing is said to be reliable if Cronbach alpha 0.6 and composite reliability 0.7 [20]. This value is the minimum value for acceptance of the validity level of the reliability test. Hair [21] suggests that the higher the alpha value of a construct, the stronger the relationship between the constructs. The range of Hair values is in Table 5.

Table 5. Hair Range Value

Range Value	Description
<0.6	Poor
0.6 to 0.69	Moderate
0.7 to 0.79	Good
0.8 to 0.89	Very Good
0.9 to 1.0	Excellent

The results of the reliability testing for the UTAUT model in this research are in Table 6.

Table 6. Cronbarch Alpha and Composite Reliability Value

Construct	Cronbach's Alpha	Composite Reliability
Effort Expectancy	0,956	0,968
Social Influence	0,916	0,947
Behavioral Intention	0,935	0,959
Facilitating Condition	0,954	0,967
Performance Expectancy	0,947	0,962
Use behavior	0,904	0,940

Table 5 and Table 6 show that the Cronbach alpha value and composite reliability of each construct of the UTAUT method meet the minimum standard of validity value. So it can be concluded that the model used in this study is valid and can be continued with the next analysis stage.

3.5. Determinant Test

If all previous tests have shown valid values, then the next step is the determinant test. The analysis results at this stage are used to review the effect of the independent variables on the dependent variable. The results of the analysis of the determinant test of the UTAUT method are attached in Table 7.

Table 7. R-Square Value

Construct	R-Square
Behavioral Intention	0,864
Use Behavioral	0,975

The results of the analysis of the determinant test of the UTAUT method can be seen through the measurement of the BI construct. The r-square value of this model for the Behavioural Intention construct is 0.975 [22]. Based on this figure, it can be concluded that the other four constructs have an influence of 97.5% on the BI construct. In contrast, 2.5% is influenced by other factors outside the construct in this study. The r-square value for the user behavior construct is 0.864. This means that other constructs have an influence of 86.4% on Use Behaviour constructs.

After knowing the impact of each construct, the next step is to test the hypothesis and draw conclusions. Testing the hypothesis in this study uses a significance value of 95%. The T-statistic result with that level is 1.96. If the results of the T-statistic are outside the value range of -1.96 to 1.96, then the hypothesis is accepted or said to be valid [23]. Conversely, if the results of the T-statistic are in the range of -1.96 to 1.96, then the hypothesis is rejected or said to be invalid. The results of the UTAUT model test analysis are shown in Figure 4 and Table 8.

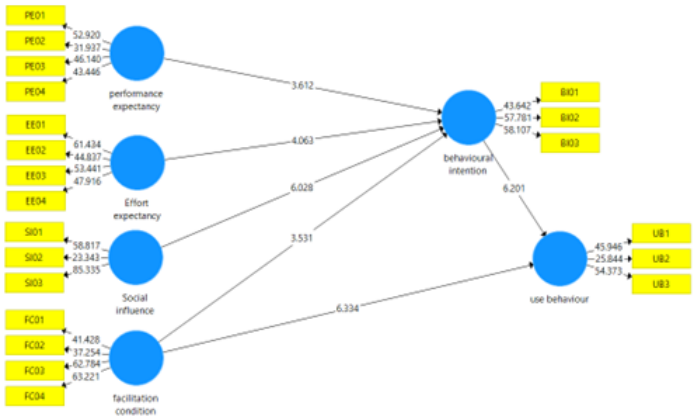

Figure 4. T-Statistic value of the UTAUT Model

Table 8. T-Statistic of UTAUT Model

Construct	Path Coefficient	T-Statistic
PE ->BI	0,137	3.612
EE ->BI	0,274	4.603
SI ->BI	0,383	6.028
FC ->BI	0,213	3.531
FC ->UB	0,485	6.334
BI ->UB	0,452	6.201

Table 8 shows that of the six construct relationships hypothesis formed, all t-statistic values are outside the range of invalid values. The explanation of each relationship is as follows:

H1: With a T-Statistic value of 3.612, it means that PE has a significant effect on BI. The path coefficient value of 0.137 indicates that the FC construct provides a positive correlation value with the BI construct.

H2: The T-Statistic value of 4.603 means that EE significantly affects BI. The path coefficient value of 0.274 indicates that the EE construct provides a positive correlation value with the BI construct.

H3: The T-Statistic value is 6.028, meaning that SI significantly affects BI. The path coefficient value of 0.383 indicates that the SI construct provides a positive correlation value with the BI construct.

H4: With a T-Statistic value of 3.531, it means that FC significantly affects BI. The path coefficient value of 0.213 indicates that the PE construct positively correlates to the BI construct.

H5: With a T-Statistic value of 6.334, it means that FC significantly affects UB. The path coefficient value of 0.485 indicates that the FC construct positively correlates to the UB construct.

H6: With a T-Statistic value of 6.021, it means that BI has a significant effect on UB. The path coefficient value of 0.452 indicates that the BI construct positively correlates to the UB construct.

It should be noted that the SIPENDOL measured in this study had previously been analyzed using the User-Centered Design (UCD) method. This analysis is carried out to make this system easier and more useful for users directly. The analysis was carried out with the same respondents in this study. Users who previously gave suggestions were then given a questionnaire again using the UTAUT method. The questionnaire was given to the user after the SIPENDOL developer had made improvements based on UCD analysis and the user had tried the updated SIPENDOL again.

4. CONCLUSION

From the test results above, it is known that all the hypotheses that have been prepared are acceptable. Apart from that, from these results, it can be said that most SIPENDOL users have accepted the updated SIPENDOL based on UCD analysis. Considering that the impact of implementing SIPENDOL promises to increase the willingness of patients, families, or users, the hospital must fully support the implementation of SIPENDOL. The hospital also needs to carry out periodic evaluations so that it can find out which aspects need to be adjusted in the future. Some suggestions for further research include conducting research with more respondents. In measuring the implementation of a system, it is better to use at least two measurement models in order to compare the implementation results more validly. In addition, the number of constructs used in measuring the implementation of a system should be more than the number of constructs in this study, namely six constructs.

5. ACKNOWLEDGEMENTS

Thank you to all respondents who are willing to fill out our form. Thank you to Ahmad Dahlan University Yogyakarta and PKU Muhammadiyah Gombong Hospital.

6. DECLARATIONS

AUTHOR CONTIBUTION

The first author carried out library research, field studies, data collection parameters, and system analysis, performed UTAUT and UCD method calculations, and compiled publication scripts. The second and third authors carried out library research and corrected the manuscript.

FUNDING STATEMENT

PKU Muhammadiyah Gombong Hospital funded this research.

COMPETING INTEREST

The authors declare that there are no conflicts of interest regarding the publication of this paper.

REFERENCES

[1] F. N. Afiana, P. Subarkah, and A. K. Hidayat, "Analisis Perbandingan Metode TAM dan Metode UTAUT 2 dalam Mengukur Kesuksesan Penerapan SIMRS pada Rumah Sakit Wijaya Kusuma DKT Purwokerto," *MATRIK : Jurnal Manajemen, Teknik Informatika dan Rekayasa Komputer*, vol. 19, no. 1, pp. 17–26, 2019.

[2] V. W. Safira and T. P. Sari, "Evaluasi Penggunaan Pendaftaran Online dengan Metode Unified Theory of Acceptance and Use of Technology (UTAUT) di Rumah Sakit Islam Ibnu Sina Pekanbaru," *Journal of Hospital Management and Health Sciences (JHMHS) EVALUASI*, vol. 1, no. 2, pp. 24–34, 2020.

[3] N. M. M. Wahyu Astani, N. L. P. A. Puspitaning Ati, and E. Ernawaty, "Analysis of Acceptance of E-Health Application By Users in Primary Healthcare Center in Surabaya City," *The Indonesian Journal of Public Health*, vol. 16, no. 1, p. 66, 2021.

[4] N. D. Astuti, K. Adi, and A. S. Putro, "Analisis Penerimaan Sistem Pendaftaran Online Puskesmas Menggunakan TAM2 dan UTAUT," *Jurnal Manajemen Informasi Kesehatan Indonesia*, vol. 8, no. 2, p. 170, 2020.

[5] H. Rakhmawati, S. S. T, and M. K. Rusydi, "Influence of TAM and UTAUT Models of the Use of E-Filing on Tax Compliance," *International Journal of Research in Business and Social Science (2147- 4478)*, vol. 9, no. 1, pp. 106–111, jan 2020.

[6] L. Reza, S. Sunardi, and H. Herman, "Penilaian Sistem Informasi Akademik dengan Metode Technology Acceptance Model," *Fountain of Informatics Journal*, vol. 7, no. 1, p. 31, 2021.

[7] B. Al Aufa, I. S. Renindra, J. S. Putri, and M. I. Nurmansyah, "An Application of the Unified Theory of Acceptance and Use of Technology (UTAUT) Model for Understanding Patient Perceptions on Using Hospital Mobile Application," *Enfermeria Clinica*, vol. 30, pp. 110–113, 2020.

[8] I. Ismarmiaty and D. Etmy, "Model Pendekatan UTAUT2 Modifikasi pada Analisis Penerimaan dan Penggunaan Teknologi E-Government di Nusa Tenggara Barat," *MATRIK : Jurnal Manajemen, Teknik Informatika dan Rekayasa Komputer*, vol. 18, no. 1, pp. 106–114, 2018.

[9] Ismarmiaty, "Analisis Model Penerimaan dan Penggunaan Sistem Informasi Website Padamu Negeri oleh Pengguna Menggunakan Model UTAUT," *MATRIK : Jurnal Manajemen, Teknik Informatika dan Rekayasa Komputer*, 2016.

[10] S. A. Raza, W. Qazi, K. A. Khan, and J. Salam, "Social Isolation and Acceptance of the Learning Management System (LMS) in the Time of COVID-19 Pandemic: An Expansion of the UTAUT Model," *Journal of Educational Computing Research*, vol. 59, no. 2, pp. 183–208, sep 2020.

[11] N. F. Ulfa, D. I. Sensuse, and Y. Ruldeviyani, "Analysis of Factors Affecting The Success of The Use of Academic Information Systems On Lecturer Users : A Case Study of Sriwijaya University," pp. 301–306, 2019.

[12] K. Jain and R. Chowdhary, "A Study on Intention to Adopt Digital Payment Systems in India: Impact of COVID-19 Pandemic," *Asia Pacific Journal of Information Systems*, vol. 31, no. 1, pp. 76–101, 2021.

[13] S. R. Ekayanti and Irwansyah, "UTAUT in Communication Technology of Learning Management System," *2018 International Conference on Advanced Computer Science and Information Systems, ICACSIS 2018*, pp. 253–258, 2019.

[14] Y. K. Dwivedi, N. P. Rana, A. Jeyaraj, M. Clement, and M. D. Williams, "Re-Examining the Unified Theory of Acceptance and Use of Technology (UTAUT): Towards a Revised Theoretical Model," *Information Systems Frontiers*, vol. 21, no. 3, pp. 719–734, 2019.

[15] O. K. Abayomi, N. E. D., and A. N. Ajao, "Factors Influencing the Adoption of Clinical Informatics Tools among Medical Doctors in South Africa," *SRELS Journal of Information Management*, vol. 14, no. 2, pp. 122–136, 2020.

[16] S. Rahi, M. M. Othman Mansour, M. Alghizzawi, and F. M. Alnaser, "Integration of UTAUT Model in Internet Banking Adoption Context," *Journal of Research in Interactive Marketing*, vol. 13, no. 3, pp. 411–435, jan 2019.

[17] L. Simatupang, I. Solvia, K. Kaban, and S. Lestari Ramadhani Nasution, "Analysis of Factors Affecting the Acceptance of Hospital Information System Using UTAUT Method in Budi Kemuliaan Hospital Batam Year 2021," *International Journal of Health and Pharmaceutical (IJHP)*, vol. 3, no. 1, pp. 133–145, sep 2022.

[18] Q. Wang, Y. Ma, J. Mao, J. Song, M. Xiao, Q. Zhao, F. Yuan, H. Wang, and L. Hu, "Factors influencing patients' intention to use hospital information system in the old-new transition period: A case study of Hospital Examination Reservation System," 2022.

[19] H. B. H. Le, C. T. Ngo, T. T. H. Trinh, and T. T. P. Nguyen, "Factor affecting customers' decision to use mobile banking service: A case of thanh hoa province, Vietnam," *Journal of Asian Finance, Economics and Business*, vol. 7, no. 2, pp. 205–212, 2019.

[20] L. Reza, Sunardi, and Herman, "Academic Information System Assessment of AKRB Yogyakarta Using UTAUT," *KHIF*, vol. 8, no. 1, 2022.

[21] H. Nindito, E. D. Madyatmadja, and A. V. Dian Sano, "Evaluation of E-government Services Based on Social Media Using Structural Equation Modeling," *Proceedings of 2019 International Conference on Information Management and Technology, ICIMTech 2019*, vol. 2019-Augus, no. August, pp. 78–81, 2019.

[22] M. F. Obeidat, "Factors Affecting the Adoption of Electronic Health Records in Hospitals: A Systematic Review and Empirical Analysis Based on UTAUT Model," *Health Informatics Journal*, vol. 25, no. 2, pp. 266–278, 2019.

[23] K. Nikolopoulou, V. Gialamas, and K. Lavidas, "Habit, Hedonic Motivation, Performance Expectancy and Technological Pedagogical Knowledge Affect Teachers' Intention to Use Mobile Internet," *Computers and Education Open*, vol. 2, p. 100041, 2021.

[This page intentionally left blank.]

21% Overall Similarity

Top sources found in the following databases:

- 15% Internet database
- Crossref database
- 0% Submitted Works database
- 16% Publications database
- Crossref Posted Content database

TOP SOURCES

The sources with the highest number of matches within the submission. Overlapping sources will not be displayed.

1	researchgate.net Internet	3%
2	Imam Riadi, Herman Herman, Nur Hamida Siregar. "Mobile Forensic of ... Crossref	1%
3	Allicia Deana Santosa, Nuryanti Taufik, Faizal Haris Eko Prabowo, Mira ... Crossref	1%
4	jurnal.unej.ac.id Internet	1%
5	files.eric.ed.gov Internet	<1%
6	globalscientificjournal.com Internet	<1%
7	Imania Halwa El Kariema, Sandu Siyoto, Ratna Wardani. "Evaluation an... Crossref	<1%
8	questjournals.org Internet	<1%

9	ojs.unpkediri.ac.id Internet	<1%
10	atlantis-press.com Internet	<1%
11	eprints.worc.ac.uk Internet	<1%
12	koreascience.kr Internet	<1%
13	eprints.utar.edu.my Internet	<1%
14	ijphs.iaescore.com Internet	<1%
15	jsi.cs.ui.ac.id Internet	<1%
16	igi-global.com Internet	<1%
17	rcastoragev2.blob.core.windows.net Internet	<1%
18	Khwanjira Ponsree, Taksin Phongpaew, Phaninee Naruetharadhol. "Stu... Crossref	<1%
19	eprints.qut.edu.au Internet	<1%
20	ejurnal.stmik-budidarma.ac.id Internet	<1%

21	repository.upi.edu Internet	<1%
22	Fiby Nur Afiana, Pungkas Subarkah, A. Kholil Hidayat. "Analisis Perban... Crossref	<1%
23	ejournal3.undip.ac.id Internet	<1%
24	Frederick Pobee, Daniel Opoku. "The Moderating Effects of Gender on ... Crossref	<1%
25	Minghao Pan, Wei Gao. "Determinants of the behavioral intention to us... Crossref	<1%
26	Radimas Putra Muhammad Davi Labib, Sirojul Hadi, Parama Diptya Wi... Crossref	<1%
27	Wan Azizah Sri Nuraini, Hawwin Mardhiana, Aris Kusumawati. "Analysi... Crossref	<1%
28	moam.info Internet	<1%
29	Jeffrey N. Lowenthal. "Using Mobile Learning: Determinates Impacting ... Crossref	<1%
30	Shuhaida MD Noor, S. Mostafa Rasoolimanesh, Mastura Jaafar, Vithya... Crossref	<1%
31	Sri Nawangsari, Robby Kurniawan Harahap, Harun Al Rasyid, Nina Herli... Crossref	<1%
32	e-journal.unair.ac.id Internet	<1%

33	Bobby Poerwanto, Fajriani Fajriani. "Resilient Backpropagation Neural ... Crossref	<1%
34	Supaat, Soni Harsono. "The Influence of the Perception of Learning Pro... Crossref	<1%
35	Badra Al Aufa, Intan Syaffira Renindra, Julianti Siannita Putri, Mocham... Crossref	<1%
36	Seyed Abolhassan Pourhosseini, Ahmad Reza Kasraei, Tahmorth Sohr... Crossref	<1%
37	jurnal.kdi.or.id Internet	<1%
38	ijstr.org Internet	<1%
39	Akram Hossain, Rui Quaresma, Habibur Rahman. "Investigating factors... Crossref	<1%
40	Prio Utomo, Florentina Kurniasari, Purnamaningsih Purnamaningsih. "T... Crossref	<1%
41	Sri Ayu Andayani, Sri Umyati, Umar Dani, Arjon Turnip. "Service Quality ... Crossref	<1%
42	academic.oup.com Internet	<1%
43	cmuj.cmu.ac.th Internet	<1%
44	Jafarkarimi, Hosein, Robab Saadatdoost, Alex Tze Hiang Sim, and Jee ... Crossref	<1%

45	R.W. Brennan, P. Rogers. "Stochastic optimization applied to a manufa... Crossref	<1%
46	"Digital Nations - Smart Cities, Innovation, and Sustainability", Springer ... Crossref	<1%
47	Mehree Iqbal, Nabila Nisha, Afrin Rifat, Pradiptarathi Panda. "Exploring ... Crossref	<1%

Excluded from Similarity Report

- Bibliographic material
- Cited material
- Quoted material
- Manually excluded sources

EXCLUDED SOURCES

journal.universitasbumigora.ac.id Internet	**94%**
Lukman Reza, Sunardi Sunardi, Herman Herman. "Academic Information Syst... Crossref	**26%**