



ANALYSIS OF USER ACCEPTANCE OF THE MOBILE APPLICATION OF NATIONAL HEALTH INSURANCE USING THE UNIFIED THEORY OF ACCEPTANCE AND USE OF TECHNOLOGY (UTAUT) METHOD

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Abstract

Information and Communication Technology (ICT) plays an important role in the business world, not only as a tool to gain a competitive position but also to achieve time and cost efficiency. One application which is widely used by the public, especially in the health sector is JKN Mobile, which was developed by Social Security Agency of Health to get closer to its users in obtaining health information and health facilities. This study aims empirically to explain the factors which influence the acceptance of the Mobile application of National Health Insurance from the user's point of view. This research adapts the Unified Theory of Acceptance and Use of Technology (UTAUT) as a theoretical basis. Data collection used a survey and this effort succeeded in obtaining 177 valid responses. The survey data was then rigorously analyzed using the Structural Equation Model - Partial Least Square (SEM-PLS). The results of this study indicate that Performance Expectation (PE), Effort Expectation (EE) and Social Influence (SI) have a positive effect on User Behavior Intentions (BI) with t-test values of 4.231, 3.750 and 4.762 respectively. These three variables can convincingly explain the BI of 65.0% in using the application. Furthermore, the Facilitating Condition (FC) and BI variables contribute 67.5% to explain the factor variance in the use of the Mobile application of National Health Insurance with t-test values of 8,698 and 4,253 respectively BI to Used Behavior (UB) and FC to UB. Therefore, this research is theoretically contributed by validating the use of UTAUT in the deployment of ICT in the health sector.



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I. INTRODUCTION

Currently, the application of information and communication technology is needed by the business world or organizations in an effort to win the competition. The application of technology and communication is widely used in the world of business or organizations to achieve time and cost efficiency, which causes every business person or organization to feel the need to apply it in the work environment. The application of information and communication technology in the health sector

provides convenience in conducting transactions (Hanifah 2020), shortens patient waiting time (Sari, Hartini et al. 2019), stores and maintains data more easily (Hidayati and Ramdhani 2020), and gets other health facilities which are obtained by the community only by using a smartphone (Krisdayanti 2021). One company in the health sector which has implemented information and communication technology is Social Security Agency of Health.

Social Security Agency of Health is a legal entity which administers the National Health Insurance Program for all people in Indonesia. (Krisdayanti 2021). Social Security Agency of Health has a Vision and Mission which aims to provide good quality health insurance and provide the best service to participants and the people of Indonesia. The Mobile application of National Health Insurance is a new breakthrough issued by Social Security Agency of Health with the aim of making it easier for Social Security Agency of Health participants to change participant data, obtain information on participant family health data, find out the amount of participant contribution fees, and make it easier to get health facility services (Krisdayanti 2021). The Mobile application of National Health Insurance still has a low rating on the Google PlayStore (Della, Rabi'ah et al. 2021). There are still many negative comments from users who express dissatisfaction and discomfort with using the application. As a result, many people have not used the Mobile application of National Health Insurance.

Christina, Suhud et al (2018) stressed the importance of knowing the acceptance of technology on the user's side where this is inseparable from the attitude towards the behavior of using the application. Attitude is a determining factor for the intention to use technology. They also stated that the attitude of a person's behavior is the result of considering the positive or negative results obtained from that behavior so that the user's attitude influences the intention of the usage behavior.

The study of technology acceptance by users is an important matter so that the factors which influence the success of the implementation of a technology can be identified. On the other hand, the inhibiting factors can be a concern for improvement. Therefore the theory or model used to explain technology acceptance. One model which is often used is the Unified Theory of Acceptance and Use of Technology (UTAUT). UTAUT is a model which is used to explain user behavior towards an information technology (Mursityo, Saputra et al, 2019). UTAUT is developed by Venkatesh, Morris et al, (2003) through various reviews and integrity of eight dominant theories and models. Those are Theory of Reasoned Action (TRA), Technology Acceptance Model (TAM), Motivational Model, Theory of Planned Behavior (TPB), Combined TPB/ TAM, Model of PC Utilization, Innovation Diffusion Theory (IDT), and Social Cognitive Theory (SCT). The UTAUT model has the main constructs which influence Behavioral Intention (BI) and Use Behavior (UB) such as Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), and Facilitating Condition (FC) (Permana and Dewi 2019).

Based on the discussion above, this study aims to determine the acceptance of the Mobile

application of National Health Insurance in the community. Based on this UTAUT theory, the following hypotheses are proposed:

H1: Performance Expectancy (PE) has a positive effect on Behavioral Intention (BI) in using the Mobile JKN application.

H2: Effort Expectancy (EE) has a positive effect on Behavioral Intention (BI) in using the Mobile application of National Health Insurance.

H3: Social Influence (SI) has a positive effect on Behavioral Intention (BI) in using the Mobile application of National Health Insurance.

H4: Facilitating Condition (FC) has a positive effect on Use Behavior (UB) on the use of the Mobile application of National Health Insurance.

H5: Behavioral Intention has a positive effect on Use Behavior (UB) on the use of the Mobile application of National Health Insurance.

II. LITERATURE

2.1 Acceptance Theory Review

Lee and Lee (2019) explained that the acceptance of new technology is a condition in which an individual intends to use a system and if it is available then the individual can use the system and run the system. A number of theories or frameworks have been developed to explain the acceptance of new technology as well as the factors involved (Taherdoost 2018), such as TAM (Theory Acceptance Model), IDT (Innovation Diffusion Theory) and UTAUT.

The Technology Acceptance Model (TAM) is a framework which was introduced by Davis in 1983 (Granić and Marangunić 2019). There are two important factors in determining the attitude and then the user's intention to use a technology. Those are perceived usefulness and perceived ease of use. Users form a positive attitude and these users consider technology to be useful and easy to use. According to this theory, both factors can be influenced by external factors. Therefore, this theory is widely used and developed by previous researchers. (Patel and Patel 2018, Lee and Lee 2019).

Innovation Diffusion Theory (IDT) explains the factors which influence a person in adopting innovation and was introduced by Rogers (Rogers, Singhal et al. 2014). This theory itself is part of a series of innovation adoption theories explained by Rogers. In the persuasion phase, Rogers identified that there are five characteristics as antecedents in the decision to adopt an innovation. Those are relative advantage, compatibility, complexity, trialability, and observability. First, the characteristics of relative advantage are closely related to the advantages of using the application which users get. Second, compatibility relates to whether the introduced innovation is compatible with the user's habits. Third, complexity reflects the ease of use of the introduced innovation. Fourth, users will feel comfortable when given the opportunity to try the introduced technology. The

last characteristic, observability becomes a driving factor for adoption when users get the opportunity to see examples of the use of the technology.

This study adopts the Unified Theory of Acceptance and Use of Technology (UTAUT) to explain the factors which contribute significantly to technology acceptance. UTAUT was developed by Venkatesh, Morris et al (2003). Previously, Venkatesh et al conducted tests using eight previous theories to build and develop the UTAUT model and determine the significant variables in the UTAUT model. The variables contained in the UTAUT model are:

- a. Performance Expectancy (PE), which is defined as a variable which can measure a person's level of confidence in using a system that will help users to gain performance benefits at work. Based on the research, Permana and Dewi (2019), there are three indicators. Those are useful, increased my productivity, and more quickly.
- b. Effort Expectancy (EE), which is defined as the level of ease associated with using a system. On research (Chandra and Novita 2020), there are three indicators in EE. Those are perceived ease of use, complexity and ease of use.
- c. Social Influence (SI), which relates to the extent to which an individual sees the interests of others, it influences to take advantage of the new system. The indicators used in this study (Permana and Dewi 2019) are subjective norms, social factors, and image.
- d. Facilitating Conditions (FC), which is defined as the extent to which a person believes that the organizational and technical infrastructure is available to support the system (Chandra and Novita 2020). Facilitating Conditions use three indicators. Those are perceived behavioral control, facilitating conditions and compatibility.
- e. Behavioral Intention (BI), which is defined as one of the things which underlies desires, plans, intentions, or beliefs which are oriented towards a number of goals. On research (Permana and Dewi 2019), the indicators used were frequently using, planning to use, and predicting to use.
- f. Use Behavior (UB), which is defined as a real condition in the use of an information technology. On research Permana and Dewi (2019), the indicators used were satisfaction with the system, satisfaction with use, and satisfaction with experience.

Researchers identified several studies which used UTAUT as a research framework with different contexts (Kusumawardani 2018, Permana and Dewi 2019, Nurmalasari, Temesvari et al, 2020). This shows that this theory is in accordance with that used by cases in previous studies. Kusumawardani (2018) used the UTAUT model to analyze user behavior in using the Android Work

Order application where user factors can determine the success of application implementation. The results of the study stated that there was a positive effect (EE and SI), and PE had no effect on BI. Furthermore, FC and BI have a positive and significant effect on UB, with the overall results proving that UB earns 34.7%. In another research Permana and Dewi (2019), this research was conducted to determine acceptance of the OVO application in the city of Denpasar using the UTAUT application. The analysis process of this research used the Partial Least Square (PLS) model with a sample of 125 people. The conclusions obtained from this study were that PE, EE, SI, and FC had a positive effect on BI. However, the moderator variable was stated to not bind the relationship between the independent variables and the dependent variable in the OVO application in Denpasar.

On research Nurmalasari, Temesvari et al. (2020), this study aimed to see whether the community's response is positive, negative or neutral to the Mobile JKN application. The data was obtained through Twitter social media tweets with scaping data for 11 months. The results of this study found that out of 528 tweets, as many as (42%) had a positive effect, (29%) were neutral and (29%) were negative. The highest percentage was positive. Unfortunately, it was still less than 50% so that more socialization was needed for participants in maximizing the use of the Mobile application of National Health Insurance.

2.2 Overview of Mobile JKN (National Health Insurance Mobile)

According to Sutrisno, Hidayat et al. (2019), mobile application is a software unit designed to meet the needs of several activities such as commerce, community service, advertising and many others. Mobile applications can assist clients in connecting with internet providers which are usually only reachable by a PC (Personal Computer) made easier with smartphone devices which are more comfortable to carry anywhere (portable).

According to Mursityo, Saputra et al. (2019) Good Governance is good governance and has been defined by various institutions followed by the world. One of the institutions is the United Nations Development Program (UNDP) in a document entitled "*Governance for Sustainable Human Development (1997)*" defines good governance as a synergistic relationship between the state, the private sector, and society.

The National Health Insurance Program is a government-owned program which aims to provide comprehensive health insurance for every Indonesian so they can live a healthy life.

Health Insurance is a guarantee in the form of health protection for participants to be able to obtain health care benefits and protection in meeting basic health needs.

III. RESEARCH METHODS

This research uses a quantitative approach by conducting a survey of parties which have or are directly related to the object of the research. This section explains the techniques and methods to be used including the considerations in selecting the method.

3.1 Development of Research Instruments

The survey was conducted to potential respondents, those who use the Mobile application of National Health Insurance. The instrument used in this study was adapted from Nuari, Nurkhin et al. (2019). **Error! Reference source not found.** shows the operational definition used in this study.

Table 1. Definition of Operational Variables

No.	Variable	Definition
1	Performance Expectancy (PE)	The degree to which users believe that using National Health Insurance Mobile will help them to gain benefits in carrying out health-related activities
2	Effort Expectancy (EE)	The level of convenience obtained by users regarding the use of National Health Insurance Mobile in information activities regarding health
3	Social Influence (SI)	A strategy in which users convince people to believe that the technology used is important and useful in information about health
4	Facilitating Condition (FC)	The degree to which users believe that the organizational and technical infrastructure exists to support the use of the system in health-related activities
5	Behavioral Intention (BI)	The intention of the user to use the Mobile application of National Health Insurance
6	Use Behavior (UB)	User behavior which is defined as the intensity or frequency of users in using National Health Insurance Mobile

The instruments in this study present indicators obtained from several sources to measure variables.

Mursityo, Saputra et al. (2019) explained indicators related to PE, for example (1) the application saves me time and effort to get health services, (2) this application allows me to get services faster, (3) this application is useful in accessing health services, (4) This application increases the productivity of healthcare services.

Aprilisa, Samsuryadi et al (2021) explained the indicators that reflect EE. Those are (1) the Mobile application of National Health Insurance is easy to learn, (2) it is easy for me to use the Mobile application of National Health Insurance, (3) I am confident that I can use the Mobile application of National Health Insurance, (4) the Mobile application of National Health Insurance does not require specific skills in its users.

Aprilisa, Samsuryadi et al. (2021) also explained that indicators related to SI were (1) people around me said that I should use the Mobile application of National Health Insurance, (2) I used this application because of the influence of social media, (3) I used this application because of the influence of Social Security Agency of Health.

Aji (2021) mentioned that the indicators related to FC are, (1) the availability of special staff to help me if I have difficulty using the Mobile application of National Health Insurance, (2) I have a device to access the Mobile application of National Health Insurance, (3) I have the necessary knowledge to use the Mobile application of National Health Insurance, (4) the availability of guidelines for using the Mobile application of National Health Insurance.

Nuari, Nurkhin et al. (2019) explained that BI has the following indicators: (1) I intend to use the Mobile application of National Health Insurance in the future, (2) I support friends and family to use the Mobile application of National Health Insurance, (3) I plan to use the Mobile application of National Health Insurance again in the future, (4) I will try to continue using the Mobile application of National Health Insurance.

Aprilisa, Samsuryadi et al. (2021) said that the indicators which have a relationship with UB are, (1) I often use the Mobile application of National Health Insurance to access health information, (2) I like using the Mobile application of National Health Insurance, (3) I always use the Mobile application of National Health Insurance, (4) I will use the Mobile application of National Health Insurance as the first choice in finding information or transactions on Social Security Agency of Health.

3.2 Respondents and data collection techniques

This study aims to determine the perceptions of the Mobile application of National Health Insurance users. As explained above, this application is one of the services provided by Social Security Agency of Health to make it easier for users to carry out activities related to health facilities, so that every user of Social Security Agency of Health application is eligible to become a respondent in this study. Social Security Agency of Health has a health program called National Health Insurance – Indonesian Health Card Program. According to Komala and Firdaus (2020), in 2019 as many as 215,784,340 people have become National Health Insurance – Indonesian Health Card participants. Since the inauguration of the Mobile application of National Health Insurance on November 15 2017 until January 1 2019, there were 3,882,972 users of the Mobile application of National Health Insurance.

Data collection was carried out by distributing questionnaires to users of the Mobile application of National Health Insurance. To ensure this, the researchers asked individual communities directly whether they were Social Security Agency of Health users and used the Mobile application of National Health Insurance. If the person concerned answers yes, then the person concerned is offered to participate in the survey and vice versa if the person concerned answers no, then the researcher would not offer the survey. The measurement scale in this study uses a *Likert scale*, which is a measurement

scale which measures a person's attitude or opinion towards an event using 4 points (Nursiddieq, Wahyudi et al. 2022).

3.3 Data analysis

This study uses quantitative research. Quantitative research includes the variables in the study and the relationships between variables, participants, and research locations. Quantitative research usually begins by identifying the main variables in the study (independent, intervening, or dependent) and then determining how these variables are measured or observed. So it can be concluded that quantitative research is to connect variables which are commonly found in survey research, or to compare certain samples or groups in relation to research results. Data collection techniques in this study using a questionnaire technique. This data is analyzed with a quantitative approach using statistical analysis. The name is *Partial Least Square – Structural Equation Model* (PLS-SEM) with the aim of conducting path analysis with the dependent variable (Juliandi 2018).

The analysis process adopts the steps recommended by Hair, Risher et al (2019). Those are (1) Preliminary considerations, (2) Measurement Model Analysis, (3) Structural Model Assessment. Preliminary Considerations is a process which aims to ensure the data to be processed meets the minimum requirements of each test. Measurement Model Analysis is the next stage where this analysis aims to ensure that both indicators and variables meet the criteria which meet the minimum requirements. While the last test is the Structural Model Assessment where this analysis aims to predict the causality relationship (cause and effect relationship) between variables.

This study aims to determine user acceptance as seen from the UTAUT method. Therefore, the instrument developed is based on previous research as discussed in the instrument development section.

IV. RESULTS AND DISCUSSION

The description of the data presented is to provide an overview of the data collection carried out in the field. Data collection was carried out by distributing questionnaires to respondents, people who use the Mobile application of National Health Insurance as many as 199 respondents.

4.1 Preliminary considerations

4.1.1 Missing Data

Missing data occurred when there is no data stored in the variable for observation. Missing data is a common occurrence and can have a significant effect on the conclusions reached. This study obtains 1 sample which has more than 5% incomplete response so it is not included in the next process. Thus, the total data processed is 198 responses.

4.1.2 Unengaged Responses

Unengaged Responses occur when the respondents are not serious in giving responses to the survey which has been given. The Unengaged Responses obtained in this study are 22 respondents. Then it is not included in the next process. Thus, the total data to be processed is 177 responses.

4.2 Measurement Model Analysis (Outer Model)

Testing the measurement model aims to determine the validity and reliability of the indicators used. The following is a picture of the results of testing the measurement model (Outer Model).

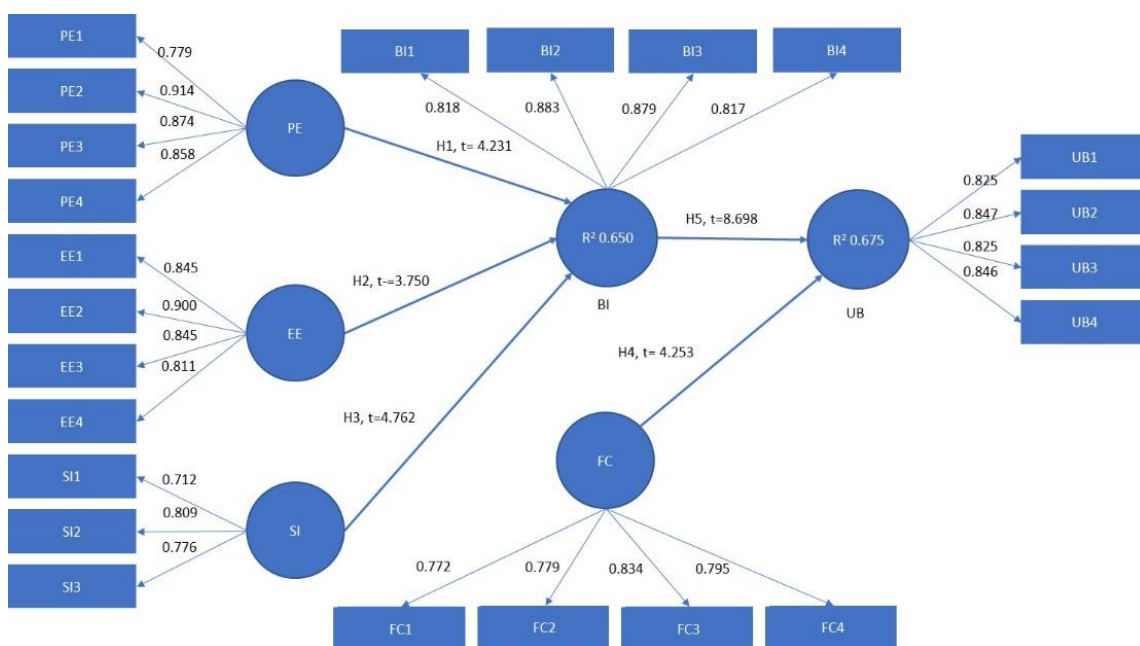


Figure 1. Test Result of the Research Model

Table 1. Measurement Model Analysis

Variabel	Code	Loading Factor	Cronbach's alpha	rho_A	Composite Reliability	(AVE)	R-square
BI	BI1	0,818	0,874	0,876	0,914	0,727	0,650
	BI2	0,893					
	BI3	0,879					
	BI4	0,817					
EE	EE1	0,845	0,873	0,889	0,913	0,724	
	EE2	0,900					
	EE3	0,845					
	EE4	0,811					
FC	FC1	0,772	0,807	0,812	0,873	0,633	
	FC2	0,779					
	FC3	0,834					
	FC4	0,795					
PE	PE1	0,779	0,879	0,884	0,917	0,736	
	PE2	0,914					
	PE3	0,874					
	PE4	0,858					
SI	SI1	0,712	0,649	0,650	0,810	0,588	
	SI2	0,809					
	SI3	0,776					
UB	UB1	0,825	0,856	0,860	0,903	0,698	0,675
	UB2	0,847					
	UB3	0,825					
	UB4	0,846					

Based on the results of the value obtained from Table 1, this shows that all indicators on these variables are declared feasible to be used as a measuring tool in testing the measurement model (Outer Model). It can be said that it is feasible in the measurement model measurement tool (Outer Model) because all values of each variable are more than the value > 0.7. (Hair, Risher et al. 2019). Thus, all indicators can be declared valid.

4.3 Discriminant Validity

Dicriminant Validity testing is carried out to measure the correlation value between variables, where the value must be greater than the correlation of other variables. Testing the data using the Fornell-Larcker Criterion test adopted from (Hair, Risher et al. 2019).

Table 2. Fornell-Larcker Criterion Test Results

	BI	EE	FC	PE	SI	UB
BI	0,852					
EE	0,699	0,851				
FC	0,713	0,737	0,795			
PE	0,729	0,759	0,691	0,858		
SI	0,629	0,477	0,489	0,525	0,767	
UB	0,794	0,687	0,714	0,674	0,587	0,836

Based on Table 2, the correlation between variables shows that the correlation value of the indicator to the variable itself is greater than the correlation between

the indicators and other variables so that it can be concluded that the variables in this study have high discriminant validity.

4.3.1 Average Variance Extracted (AVE)

Based on Table 1, **Error! Reference source not found.** it can be seen that the value of each variable is more than 0.50, so the variable can be said to be reliable.

4.3.2 Reliability Test

Based on Table 1, it can be seen that the Composite Reliability and Cronbach's Alpha values are more than > 0.60, so it can be stated that the reliability test is valid and meets the requirements (Wiwin Agustian 2022).

4.4 Structural Model Testing (Inner Model)

Testing the structural model (Inner Model) is a test which explains the causal relationship between independent variables which is built based on the substance of the theory. Testing the structural model (Inner Model) performs the following tests:

4.4.1 R² Square

On Table 1, The results of the R-Square Test (R²) show that the R² value for PE, EE, and SI variables on BI is 0.650, included in the moderate category which shows an effect of 0.650 x 100% = 65%.

The R² value for the UB variable is 0.675, Included in the moderate category which has a large influence of 0.675 x 100% = 67.5%.

4.4.2 Hypothesis test

Hypothesis testing is used to show the significance level of the indicator variable. The significance level of α used is 5%, so the t-table value is 1.96.

Table 3 Hypothesis Test Results

Hypothesis	Effect	Original Sample	T-statistic	Information
H1	PE>BI	0,350	4,231	Accepted
H2	EE>BI	0,286	3,750	Accepted
H3	SI>BI	0,308	4,762	Accepted
H4	FC>UB	0,301	4,253	Accepted
H5	BI>UB	0,579	8,698	Accepted

Based on Table 3, from the results of the hypothesis testing carried out, the following results were obtained:

1. (H1) based on data analysis, PE has a positive effect on BI. The t-statistic value obtained is 4.231 which was greater than the t-table which was 1.96. The original sample value (O) obtained was 0.350, which indicates that the PE variable with BI has a positive relationship.
2. (H2) in the results of data analysis, the t-statistic value of 3.750 is obtained which was greater than the t-table value of 1.96. The results of this study obtained an original sample value (O) of 0.286 which shows that the relationship between EE and BI variables has a positive relationship.
3. (H3) based on data analysis, t-statistic value of 4.762 is obtained which is greater than the t-table value of 1.96. The original sample (O) shows results with a positive value of 0.308, indicating a positive relationship between the SI and BI variables.
4. (H4) on the results of data analysis, the t-statistic value is 4.253, which is greater than the t-table value, which was 1.96. In the original sample (O), the result is 0.301. This shows that the FC variable with UB has a positive relationship.
5. (H5) based on the results obtained that the t-statistic value, 8.698 is greater than the t-table value, 1.96. In the original sample (O), a value of 0.579 is obtained which indicated that BI and UB has a positive relationship.

The results of testing the hypothesis above show that the variables PE, EE, SI have a positive effect on the BI variable, and the FC and BI variables have a positive effect on the UB variable. The results of this study are supported by the results of Permana and Dewi (2019) research, which explained that BI had a positive effect on UB on the acceptance and use of the OVO application. This is different from previous research conducted by Kusumawardani (2018) stated the results obtained that the PE variable did not prove to have a positive effect on the BI variable, and the results of the overall analysis could only explain UB by 34.7%.

V. CONCLUSION

From the results of data analysis and discussion, it can be concluded that PE, EE, SI have a positive

effect on BI. From users using an application and FC, and BI have a significant influence on UB on the Mobile application of National Health Insurance. Acceptance of the Mobile application of National Health Insurance using the UTAUT model is only able to explain 65% of variations in acceptance of the Mobile application of National Health Insurance technology and 67.5% of the factors influencing the use of the Mobile application of National Health Insurance technology.

Based on the results of this study, it is hoped that future research will use a moderating variable that is in accordance with the UTAUT model, whether it is a modified model or in accordance with the UTAUT model or can use a different research model. The results of this study can be used as a teaching resource or case study and as a literature review in order to conduct further research. It is hoped that the managers of the Mobile application of National Health Insurance from this research can provide input to be able to continue to improve the performance of the Mobile application of National Health Insurance.

REFERENCES

- [1] Aji, C. S. (2021). "Pengaruh Pengetahuan Ekonomi Islam Terhadap Minat Investasi Saham Syariah Di Kalangan Generasi Z: Dengan Model Utaut Perspektif Ekonomi Islam (Studi Pada Kota Surakarta)."
- [2] Aprilisa, S., et al. (2021). "Pengujian Validitas dan Reliabilitas Model UTAUT 2 dan EUCS Pada Sistem Informasi Akademik." *Jurnal Media Informatika BUDIDARMA* 5(3): 1124-1132.
- [3] Chandra, F. S. and D. Novita (2020). "Analisis Penerimaan Masyarakat Terhadap Layanan Transportasi Online Menggunakan UTAUT (Unified Theory of Acceptance and Use of Technology)." *Jurnal Teknologi Sistem Informasi* 1(1): 23-33.
- [4] Christina, H., et al. (2018). "Analisis penerimaan dan penggunaan teknologi ojek online dengan tam." *Jurnal Pendidikan Ekonomi Dan Bisnis (JPEB)* 6(1): 34-44.
- [5] Della, P., et al. (2021). "Monitoring Sistem Antrean Online Terintegrasi dengan Menggunakan Aplikasi Mobile JKN di BPJS Kesehatan." *Monitoring Sistem Antrean Online Terintegrasi dengan Menggunakan Aplikasi Mobile JKN di BPJS Kesehatan.*
- [6] Granić, A. and N. Marangunić (2019). "Technology acceptance model in educational context: A systematic literature review." *British Journal of Educational Technology* 50(5): 2572-2593.
- [7] Hair, J. F., et al. (2019). "When to use and how to report the results of PLS-SEM." *European business review* 31(1): 2-24.
- [8] Hanifah, M. (2020). *Pemanfaatan Teknologi Informasi Dan Komunikasi Pada Aplikasi*

- Halodoc Sebagai Telemedicine Check Covid-19 Dalam Upaya Preventif Penyebaran Virus Corona Di Sleman Yogyakarta, Universitas Mercu Buana Yogyakarta.
- [9] Hidayati, N. and Y. Ramdhani (2020). "Analisis Penerimaan dan Penggunaan Aplikasi Gojek Menggunakan Model UTAUT." *JAMI: Jurnal Ahli Muda Indonesia* 1(1): 85-95.
- [10] Juliandi, A. (2018). "Structural Equation Model Partial Least Square (SEM-PLS) dengan SmartPLS." Batam: Universitas Batam.
- [11] Komala, R. and A. Firdaus (2020). "Analisis Kualitas Layanan Mobile JKN Terhadap Kepuasan Peserta Badan Penyelenggara Jaminan Sosial Kesehatan." *J. Ilmu Manaj. dan Bisnis Islam* 6(2): 188-199.
- [12] Krisdayanti, W. (2021). Pemanfaatan Aplikasi Mobile Jaminan Kesehatan Nasional (JKN) untuk Meningkatkan Efektivitas Pelayanan BPJS Kesehatan di Kota Medan.
- [13] Kusumawardani, I. W. (2018). Analisis Penerimaan Dan Penggunaan Aplikasi Work Order Android (WONDROID) Menggunakan Metode Unified Theory of Acceptance and Use of Technology (UTAUT) Pada Pdam Kota Malang, University of Muhammadiyah Malang.
- [14] Lee, J.-H. and C.-F. Lee (2019). "Extension of TAM by perceived interactivity to understand usage behaviors on ACG social media sites." *Sustainability* 11(20): 5723.
- [15] Mursityo, Y. T., et al. (2019). "Analisis Penerimaan Pengguna Aplikasi Siakad Desktop Universitas Brawijaya Menggunakan Utaut." *Joutica* 4(1): 211-216.
- [16] Nuari, E. S., et al. (2019). "Analisis Determinan Pemanfaatan Edmodo Dengan Menggunakan Unified Theory of Acceptance and Use of Technology (Utaut)." *Jurnal Pendidikan Akuntansi Indonesia* 17(1): 57-73.
- [17] Nurmalasari, M., et al. (2020). "Analisis Sentimen terhadap Opini Masyarakat dalam Penggunaan Mobile-JKN untuk Pelayanan BPJS Kesehatan Tahun 2019." *Indonesian of Health Information Management Journal (INOHIM)* 8(1): 35-44.
- [18] Nursiddieq, M. H., et al. (2022). "Pengembangan Perangkat Pembelajaran Fisika Model Blended Learning Berbantuan PhET Melalui Smartphone untuk Meningkatkan Kemampuan Berpikir Kreatif Peserta Didik." *Jurnal Ilmiah Profesi Pendidikan* 7(2): 466-473.
- [19] Patel, K. J. and H. J. Patel (2018). "Adoption of internet banking services in Gujarat: An extension of TAM with perceived security and social influence." *International Journal of Bank Marketing*.
- [20] Permana, G. P. L. and L. P. K. Dewi (2019). "Analisis Penerimaan Dan Penggunaan Aplikasi OVO Dengan Menggunakan Unified Theory Of Acceptance And Use Of Technology (UTAUT) Di Kota Denpasar." *Jurnal Ilmiah Akuntansi dan Bisnis* 4(2): 186-203.
- [21] Rogers, E. M., et al. (2014). *Diffusion of innovations. An integrated approach to communication theory and research*, Routledge: 432-448.
- [22] Sari, L. M., et al. (2019). "Efektivitas Penggunaan Aplikasi Mobile JKN Sebagai Strategi Meminimalisir Tingkat Antrian di Kantor Cabang BPJS Kesehatan Kabupaten Bogor." *Jurnal Online Mahasiswa (JOM) Bidang Manajemen* 4(2).
- [23] Sutrisno, S., et al. (2019). "Application of fuzzy multiple criteria decision making (MCDM) in selection of prospective employees." *JOURNAL ASRO* 10(1): 10-16.
- [24] Taherdoost, H. (2018). "A review of technology acceptance and adoption models and theories." *Procedia manufacturing* 22: 960-967.
- [25] Venkatesh, V., et al. (2003). "User acceptance of information technology: Toward a unified view." *MIS quarterly*: 425-478.
- [26] Wiwin Agustian, W. (2022). "Kepuasan Mahasiswa Berbasis Bauran Pemasaran (Studi Kasus Kepuasan Mahasiswa Di Universitas Bina Darma Palembang)." *Kepuasan Mahasiswa Berbasis Bauran Pemasaran (Studio Kasus Kepuasan Mahasiswa Di Universitas Bina Dama Palembang)*.