THE EFFECT OF PERCEIVED EASE TO USE AND SUBJECTIVE NORM ON INTENTION TO USE WITH PERCEIVED USEFULNESS AND ATTITUDE TOWARDS USE AS INTERVENING VARIABLES
(Case Study on the Use of JKN Mobile Application in BPJS Kesehatan Pekalongan City Branch Area)

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Abstract

This study aims to test and analyze the effect of perceived ease to use and subjective norm on intention to use with perceived usefulness and attitude towards use as intervening variables (study on JKN mobile application users in the BPJS Kesehatan Pekalongan City Branch area). The data collection method used was a literature study and field study by distributing questionnaires to 39 JKN mobile application users in the BPJS Kesehatan area of Pekalongan City using proportional random sampling techniques. The data analysis technique used is Structural Equation Modeling (SEM). The results of this study showed that Perceived ease to use, subjective norm, perceived usefulness, and attitude towards use equally influenced intention to use by 71.1%. Perceived ease to use and subjective norm have an influence on attitude towards 85.5%. Perceived ease to use and subjective norm affect perceived usefulness by 69.6%. While the significance test shows that Attitude towards use, and perceived usefulness have a significant influence on intention to use. Perceived ease to use and subjective norms do not significantly influence intention to use. Perceived ease to use and subjective norm significantly influence attitudes towards use. Perceived ease to use has a significant influence on perceived usefulness. Subjective norms do not significantly affect perceived usefulness.

Keywords: Perceived Ease To Use, Subjective Norm, Perceived Usefulness, Attitude Towards

INTRODUCTION

Health problems that occur in the community will affect the development of the country and will cause losses in the economic sector. Health also has an important role in people's lives, because health is an asset of body, soul and social welfare for each individual. The government is required to be able to create a quality and quality health service system. The National Health Insurance Program (JKN) organized by the Social Security Organizing Agency Health (BPJS Kesehatan) is one form of the government's program in creating the health service system.

In the current era of digitalization, BPJS Kesehatan innovates technology-based ease of service by launching the JKN Mobile application. This application can be downloaded and accessed via a smartphone. The app was launched on November 15, 2017. However, not all new technologies can be accepted easily by the community, because the process of accepting new technology requires time and adjustment (Juhri &; Dewi, 2017). Therefore, the success of technology implementation is determined by user factors, namely the intention to use technology (Devi et al., 2018).

In fact, until now the intention to use the JKN mobile application is low because participants who use the application feel that the JKN mobile application is not useful for them if they do not need health services. BPJS

Kesehatan Pekalongan Branch Office invites all participants to register to check with health facilities using the JKN Mobile application and invites health facilities to socialize with their patients. To support the success of the JKN mobile application, several hospitals stopped using their online registration application so that patients use the JKN Mobile application, but patients prefer to come to the registration counter rather than use JKN mobile. Based on this phenomenon, testing was carried out on the interest in using the JKN mobile application or commonly referred to as intention to use.

Amarayoun's research (2019) shows that perceived ease to use has a positive and significant effect on the intention to use. But in this study will be examined other factors of perceived ease to use that influence the intention to use. While other factors that will be tested are perceived usefulness, attitude towards use, and subjective norm. It will be seen how the factors perceived ease to use, perceived usefulness, attitude towards use, and subjective norm influence intention to use.

According to the Theory of Reasoned Action (TRA) first introduced by Fishbein and Azjen in 1975, in this model, every human behaviour is estimated and explained through three main cognitive components: attitude, subjective norm and intention. Human behaviour must be in accordance with wishes, systematic, and rational (Taherdoost, 2018).

Expressed in the Theory of Planned Behavior (TPB) using individual intentions to implement pre-established behaviours (Ceglia. et.al, 2015). Something defined by attitudes towards behaviour, subjective norms and perceived behavioural control as the ability to carry out intentions, individuals have the resources and opportunities to carry out an action (Ajzen, 1980). The variables used in this theory are attitudes, subjective norms, and suggested behavioural control (Rizky and Guanwan, 2022)

In Technology Acceptance Model (TAM) is one of the theories about the use of information technology systems that is considered very influential and is generally used to explain the individual acceptance of the use of information technology systems (Jogiyanto, 2008). The first TAM was developed by Davis in 1986 based on the TRA model. The most important advantage of TAM is that it is a parsimony model, which is a simple but valid model.

RESEARCH METHOD

The samples used were JKN mobile application users located in the BPJS Kesehatan Pekalongan City Branch area.

In this study the variables used are as follows:

1. The dependent variable is the intention to use the JKN Mobile application (Y).
2. The independent variables are perceived ease to use (X1) and subjective norm (X2).
3. The intervening variables are perceived usefulness (Z1) and attitude towards use (Z2)

So the hypothesis was made:

H1: perceived ease to use has a positive and significant effect on the intention to use.

H2: subjective norm has a positive and significant effect on the intention to use.

H3: perceived ease to use has a positive and significant effect on perceived usefulness.

H4: perceived ease to use has a positive and significant effect on attitude towards use.

H5: subjective norm has a positive and significant effect on perceived usefulness.

H6: subjective norm has a positive and significant effect on attitude towards use

H7: perceived usefulness has a positive and significant effect on the intention to use.

H8: attitude towards use has a positive and significant effect on the intention to use

From the variables and hypotheses that have been made, a structural equation model is built as follows :
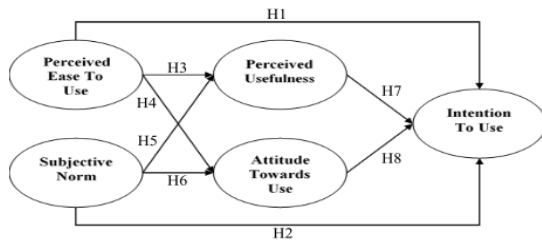

Figure 1. Constructed Structural Equation Model

After the data is obtained and the model is formed, an estimate will be made against the existing model using the PLS-SEM method and testing is carried out with several assumptions as shown in the table below:

Table 1 Assessment Criteria

Criteria	Explanation
Structural Model Evaluation	
R² for endogenous latent variables	R² results of 0.67, 0.33, and 0.19 for endogenous latent variables in structural models indicate that the models are "good", "moderate", and "weak"
Estimation of path coefficient	The estimated value for path relationships in the structural model should be significant. This significance value can be obtained by a bootstrapping procedure
f² for effect size	The f² value is 0.02. 0.15, and 0.35 can interpret whether the predictor of the latent variable has a weak, medium or large influence at the structural level
Evaluation of the Reflexive measurement model	
loading factor	The loading value must be above 0.70
Composite Reliability	Composite Reliability measures internal consistency and the value should be above 0.60
Average Variance Extracted	AVE value must be above 0.50
Discriminant Validity	The square root value of the AVE must be greater than the correlation value between latent variables
Evaluation Measurement Model	
Significance of weight value	The estimated value for the formative measurement model must be significant. This level of significance is assessed by bootstrapping
Multikolonieritas	The manifest variable in the block should be tested for multifoliate. The variance inflation factor (VIF) value can be used to test this. A VIF value above 10 indicates multifoliate.

RESEARCH RESULT
Characteristics Of Respondents

From 39 respondents, the characteristics of respondents were shown in the table below:

Table 2. Characteristics of Respondents

	Number of Respondents	Per cent
Gender		
Female	23	59%
Male	16	41%
Age		
21-30	6	15%
31-40	14	36%
41-50	14	36%
>50	5	13%
Last Education		
Junior High School	3	8%
Senior High School / Vocational High School or equivalent	4	10%
Diploma	8	21%
Bacelor	24	62%
BPJS Membership		
Contribution Assistance Recipient (PBI)	38	97%
Not Contribution Assistance Recipient (Non PBI)	1	3%
JKN Mobile Application Owner		
Never Before	1	3%
Had	3	8%
Got	35	90%

Source: data processed 2023

Convergent Validity and Reliability Test

The model that has been built using the SmartPLS application has the following results :
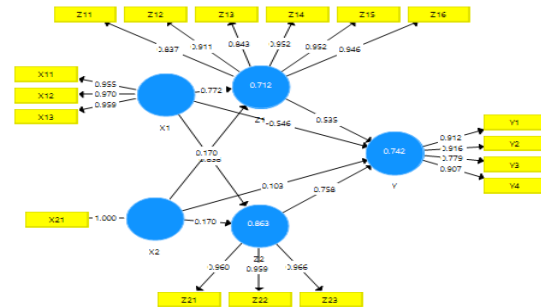

Figure 2. Estimation Model

In the Convergent Validity Test, the results obtained in the table below, the outer loading value is more than 0.7 and also the value of AVE is also more than 0.5, so the model can be said to meet the convergent validity test is met, and in the reliability test, it is required that each construct value has a Cronbach alpha value above 0.6 and a composite reliability value above 0.7. It can be seen from the table below that all constructs have met the criteria so it can be said that the model built is reliable.

Table 3. Outer Loadings

	attitude towards use	intention to use	perceived ease to use	perceived usefulness	subjective norm
X11			0.955		
X12			0.97		
X13			0.959		
X21					1
Y1		0.912			
Y2		0.916			
Y3		0.779			
Y4		0.907			
Z11				0.837	
Z12				0.911	
Z13				0.843	
Z14				0.952	
Z15				0.952	
Z16				0.946	
Z21	0.96				
Z22	0.959				
Z23	0.966				

Source: data processed 2023

Table 4. Construct Reliability dan Validity

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
attitude towards use	0.96	0.96	0.974	0.925
intention to use	0.902	0.908	0.932	0.775
perceived ease to use	0.959	0.963	0.973	0.924
perceived usefulness	0.957	0.959	0.966	0.825
subjective norm	1	1	1	1

Source: data processed 2023

The FIT model is carried out to find out how well the model is seen from NFI with NFI values around 0 to 1 with criteria close to 1 declared fit or good and it is seen that the NFI value of 0.719 is close to 1, so the model can be said to be Fit or Good.

Table 5. Model FIT

	Saturated Model	Estimated Model
NFI	0.719	0.710

Source: data processed 2023

Endogenous Construct Variants (R^2)

Table 6. R Square Value

	R Square	R Square Adjusted
Attitude Towards Use	0.863	0.855
Intention To Use	0.742	0.711
Perceived Usefulness	0.712	0.696

Source: data processed 2023

From the R Square table, it can be interpreted that:

1. Perceived ease to use, subjective norm, perceived usefulness, and attitude towards use influenced intention to use by 71.1%.

2. Perceived ease to use, and subjective norm have an influence on attitudes towards 85.5%.
3. Perceived ease to use, and subjective norm affects perceived usefulness by 69.6%.

Hypothesis Testing

Hypothesis testing by comparing the T-statistic value of 1.96. The criteria for acceptance of the hypothesis is when the T-statistic must be greater than 1.96 and the P value less than 0.05.

Tabel 7. T Statistic dan P Value

	T Statistics	P Values
attitude towards use -> intention to use	2.316	0.021
perceived ease to use -> intention to use	1.812	0.071
perceived usefulness -> intention to use	1.981	0.048
subjective norm -> intention to use	1.046	0.296
perceived ease to use -> attitude towards use	13.206	0
subjective norm -> attitude towards use	2.38	0.018
perceived ease to use -> perceived usefulness	8.644	0
subjective norm -> perceived usefulness	1.65	0.099

Source: data processing 2023

From the estimation results, it can be said that:
1. Attitude towards use, and perceived usefulness have a significant influence on intention to use.
2. Perceived ease to use and subjective norms do not significantly influence intention to use.
3. Perceived ease to use and subjective norm significantly influence attitude towards use.
4. Perceived ease to use has a significant influence on perceived usefulness.
5. Subjective norms do not have a significant effect on perceived usefulness.

DISCUSSION

Perceived ease to use, subjective norm, perceived usefulness, and attitude towards use together influence intention to use by 71.1%. Perceived ease to use and subjective norm have an influence on attitude towards 85.5%. Perceived ease to use and subjective norm affect perceived usefulness by 69.6%. While the significance test shows that Attitude towards use, and perceived usefulness have a significant influence on intention to use. Perceived ease to use and subjective norms do not significantly influence intention to use. Perceived ease to use and subjective norm significantly influence attitudes towards use. Perceived ease to use has a significant influence on perceived usefulness. Subjective norms do not have a significant effect on perceived usefulness.

It can be concluded that in increasing intention to use only the attitude towards use factor, and perceived usefulness alone because perceived ease to use and subjective norm do not have a significant impact on intention to use. Meanwhile, efforts to increase attitude towards use require the role of perceived ease to use and subjective norm. But increasing perceived usefulness only needs to increase perceived ease to use without the need for effort in increasing subjective norm.

CONCLUSIONS

Based on research that has been conducted on JKN mobile application users at BPJS Kesehatan Pekalongan City Branch, the following conclusions were obtained:
1. Perceived ease to use does not have a significant effect on the intention to use. So it does not take more effort on perceived ease to use to be able to increase intention to use.
2. The subjective norm does not significantly influence the intention to use. So that no more effort is needed on the subjective

norm to be able to increase the intention to use.

3. Perceived ease to use has a positive and significant effect on perceived usefulness. So if perceived ease to use is increased, it will also provide an increase in perceived usefulness.

4. Perceived ease to use has a positive and significant effect on attitude towards use. So if perceived ease to use is improved, it will also provide an increase in attitude towards use.

5. The subjective norm does not significantly affect perceived usefulness. So no more effort is needed on the subjective norm to be able to increase perceived usefulness.

6. Subjective norm has a positive and significant effect on attitude towards use. So if the subjective norm is increased, it will also provide an increase in attitude towards use.

7. Perceived usefulness has a positive and significant effect on the intention to use. So if perceived usefulness is increased, it will also give an increase to the intention to use.

8. Attitude towards use has a positive and significant effect on the intention to use. So if the attitude towards use is improved, it will also provide an increase in intention to use.

There are still many opportunities for factors that influence the intention to use a new technological development that needs to be studied. In addition, the research that the author did was only a mini-research. It is necessary to develop the samples used in this study.

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