

## Analysis of MyPertamina Application User Satisfaction Using End User Computing Satisfaction Method

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### Abstract

The MyPertamina application is an application that functions as a cashless payment system, where this application can make it easier for users to make BBM payments. This study aims to determine the level of user satisfaction and the factors that influence their satisfaction with the MyPertamina application using the End User Computing Satisfaction (EUCS) approach. Since 2017 this application has been running, until now it is known that the number of existing MyPertamina users is still relatively low and far from the maximum potential of the vehicle population in Indonesia. Where MyPertamina users currently are approximately 5 million users, while the number of vehicles in Indonesia itself is currently 144 million units of vehicles. This causes the target user has not been achieved in accordance with what is expected by PT. Pertamina. It can be concluded that of the 5 hypotheses tested, 1 of them was rejected. So the factors that can affect MyPertamina user satisfaction in terms of Content, Accuracy, Ease of Use, and Timeliness. Meanwhile, the format variable has no effect on MyPertamina user satisfaction.

**Keywords:** User Satisfaction, Mobile Payment, MyPertamina, EUCS

### 1. INTRODUCTION

Now, with the existence of technological developments, it can have an impact on new innovations in payment methods, namely electronic payment innovations. Currently, financial technology (fintech) has provided various kinds of non-cash payment systems (Mobile Payment), in which there are various interesting features that are useful in making it easier for customers to make various transactions [1]. With the existence of a non-cash payment system (Mobile Payment) it makes it easier for people to make transactions and this is considered more effective when compared to cash transactions [2]. Mobile payment is a payment system by making electronic (non-cash)

payments using assistive devices such as smartphones, where this mobile payment system makes payments by utilizing various technological media, such as QR Code (Quick Response Code), NFC (Near Field Communication), and the OTP (One Time Password) code. Currently, mobile payments are experiencing very rapid development in various parts of the world due to the benefits and convenience of making transactions [2].

In 2019, it has been found that currently mobile payments have contributed to the lifestyle of the Indonesian people. Where currently as many as 47% of Indonesian people state that they have now used mobile payments as a transaction tool. Where this means that there is an increase in that number by 9%, which in 2018 was only 38% [3]. So with an increase in the number of people using mobile payments as a transaction tool, this can indicate that the Indonesian people are now accustomed to applying mobile payments and in this case it means that payments using mobile payments can now be accepted as part of a payment instrument.

Knowing that there are a large number of Indonesian people using mobile payments, this can certainly encourage businesses to start using technology by providing cashless payment solutions for their consumers [4]. Thus, it is found that there are now many companies implementing electronic payment innovations, because this is considered important in attracting customer interest and because at this time, many Indonesian people have used mobile payments as a transaction tool to buy products from retail and e-commerce [2]. Even now PT. Pertamina, which is a company that produces and provides fuel for Indonesia's needs, is participating in developing the latest innovations from a financial perspective, namely the development of digital payments [5]. So with this that is currently happening in the business world, PT. Pertamina created the Loyalty Program, namely the MyPertamina mobile application. The MyPertamina application is a loyalty and e-payment program that can provide a user experience from PT. Pertamina easily for all Pertamina customers. At the start of the launch of the MyPertamina application on August 10 2017, only around 50 thousand users used MyPertamina. And until now MyPertamina has been downloaded by more than 5 million users via PlayStore [6].

However, in its development, the system has not run optimally. Where since the beginning of this application was released and implemented, PT. Pertamina (Persero) revealed that until now the number of users who have registered for MyPertamina is still very small. Even though now the application has been used

to control the distribution of Peralite and Solar subsidized BBM so that it is right on target. Where Pertamina Main Director Nicke Widyawati said that the number of car users who registered with MyPertamina was only 2.1 million (6.4%) of the total car population of 33 million units [7]. The lack of MyPertamina users since the application was launched until now can be seen from the number of vehicles in Indonesia that are not proportional to the number of MyPertamina users, namely that until now, there are only approximately 5,000,000 consumers who have used MyPertamina. Meanwhile, the number of vehicles in Indonesia itself is currently 136,137,451 vehicles [8]. Therefore, it can be seen that the number of MyPertamina users is still relatively low and far from the maximum potential that exists. Regarding this matter, Pertamina Patra Niaga VP Sales Support, Zibali Hisbul said that from the implementation of the trial distribution of Peralite and Solar for entitled users who have registered in the MyPertamina system from July 2022 to October 12, 2022, the number of MyPertamina registrants only increased by 2,872 million units of vehicles. This figure is only 8.8% of the vehicle population in Indonesia [9].

As for the number of known users, it is still relatively low and far from the maximum potential of the vehicle population in Indonesia. This is of course a question why Indonesian people are reluctant and hesitant in using the MyPertamina application. Where this causes the creation of gaps because the company turns out to be unable to fulfill promises that are communicated in accordance with the usefulness of the service [10]. So in this case it can prove that PT. Pertamina needs to pay more attention to knowing the level of success of implementing the system. Where to be able to find out to what extent the system that has been implemented can be said to be successful, the system requires an evaluation of user satisfaction to be able to prove it directly [11]. Therefore this research was conducted to find out whether an information system that was implemented was in accordance with user needs or not, so that it would be seen that there was a successful implementation of an information system in an MyPertamina application.

One model that can be used to measure user satisfaction with an information system is the End User Computing Satisfaction (EUCS) model, which is a model adopted and developed by Doll and Torkzadeh, which consists of five factors measuring user satisfaction with an information system, namely content, accuracy, format, timeliness, and ease of use [12]. The EUCS method is able to measure the level of user satisfaction with a system by comparing the

expectations and reality of an information system that emphasizes user satisfaction, by analyzing the system based on content, accuracy, appearance, ease of use and timeliness. The EUCS method emphasizes user satisfaction based on user experience related to the use of information systems [12].

User satisfaction is an indicator of success in an information system development [13]. here the level of user satisfaction of a system can be used as a reference in the system development process itself, as well as to be able to find out the advantages and disadvantages of the system being implemented because the quality of a good information system will be able to increase user satisfaction [14]. For example [15] conducted research to determine the level of user satisfaction with the LinkAja application using the EUCS model. Based on the results of data analysis that has been carried out, the results show that the factors that significantly influence user satisfaction are only the Content and Format variables, which is because the Content and Format variables have a variable significance value of  $<0.05$ , namely the Content variable is 0.00 and the Format variable of 0.012.

Using the EUCS method [12] measuring the level of user satisfaction with a system by comparing expectations and reality of an information system that emphasizes user satisfaction, by analyzing the system based on content, accuracy, appearance, user convenience and timeliness. In research [13] easured user satisfaction in an information system using six variables namely ease of use, security, and flexibility, completeness of functions or features, innovation, and reliability or stability. This is because the success of a developing information system is due to the existence of a user satisfaction. In research [16] assume that user satisfaction with an application is considered very important because later this will be used by developers as evaluation material in improving the quality of the application. Both users and developers certainly want to make the application a perfect application both in terms of system and appearance.

Research on user satisfaction was conducted by [17] on paytren applications using the EUCS model. Where this research resulted in the content variable having a negative effect of 0.09, the accuracy variable having a negative effect of 0.134, the format variable having a positive effect of 0.416, the ease of use variable having a positive effect of 0.107, the timeliness variable having a positive effect of 0.207 and being significant to users of the paytren application in the city of Palembang. Among the 5 EUCS variables, the more dominant

influence is the variable ease of use which has a positive effect of 0.256 on user satisfaction.

Furthermore, research on user satisfaction was also carried out by [18] concerning measuring user satisfaction with fintech applications: sharia fintech using the End User Computing Satisfaction (EUCS) method involving 5 variables (Format, Accuracy, Content, Timeliness, and Ease of Use). This study concluded that the reliability test results based on the Cronbach's Alpha value were known to be 0.936 which was greater than the R value in the product moment table of 0.279, which meant that the research instrument was declared reliable. The Content, Format, and Ease of Use dimensions have a positive and significant effect on user satisfaction because they have a significance value of  $>0.05$ . Then the Accuracy dimension has no effect on user satisfaction because it has a value of  $t = -0.654$  and a significant value of  $0.517 > 0.05$  and the Timeliness dimension has an effect but is not too strong in assessing user satisfaction.

## 2. METHODS

Fig 1 illustrates the stages of the proposed methodology. measuring the level of user satisfaction with a system by comparing the expectations and reality of an information system that emphasizes user satisfaction. The stages include: data collection, data analysis, and research results.

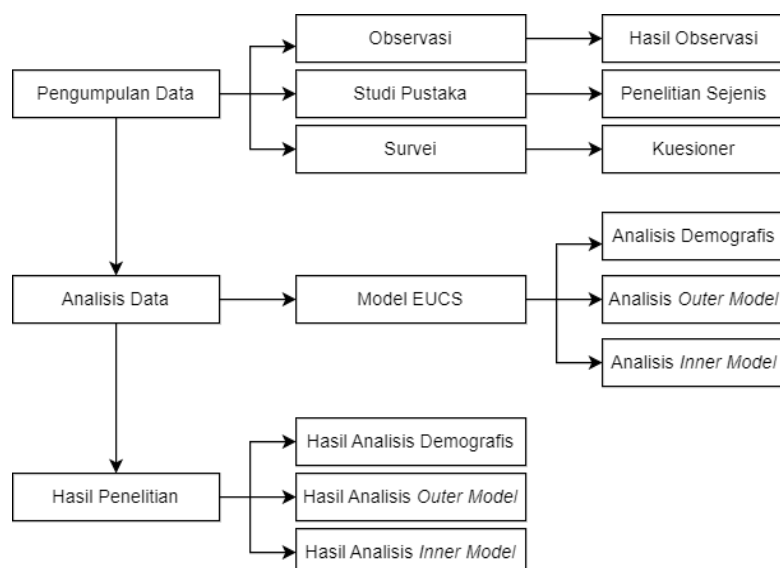


Fig 1. Research stages

Based on Fig 1 the stages of the research can be explained as follows:

## 2.1. Method of Collecting Data

The first thing the researcher did was collect the data. Where in this study required complete data and information as material that can be used as support for the existence of truth in research discussions. The data collection methods used in this research are observation, literature study, and surveys by distributing questionnaires to obtain the information needed in order to achieve the research objectives. For data collection, the authors use secondary data obtained from the results of the questionnaire. The following techniques are used:

- 1) Observations were carried out using a participant observation approach which involved researchers involved in observation activities.
- 2) Literature Study, this stage is carried out by looking for references and collecting information related to user satisfaction analysis using the End User Computing Satisfaction (EUCS) model.
- 3) Questionnaires or surveys containing questions are distributed online via the Google form and the respondents are MyPertamina application users who are domiciled in Greater Jakarta and are at least 18 years old

## 2.2 Data Analysis

After all the data has been collected, then an analysis will be carried out in this study using the End User Computing Satisfaction (EUCS) model. The reason why the researchers chose the EUCS model in this study was because Pauluzzo and Gretto's research stated that most of the other models have not proven reliable, in which case the EUCS model adopted by Doll and Torkzadeh is one of the best models for measuring user satisfaction. and is the most widely used measure of IS success. That is because EUCS refers to an affective attitude towards a particular software or application from someone who interacts with the application directly. And this study also states that this model has been successful in measuring user satisfaction, so this study suggests that this model can be used again [19].

Data analysis was carried out by processing the data to be able to analyze the data and test the hypotheses in this study with SEM-PLS using the SmartPLS version 3.0 tools. In the analysis using SmartPLS, it consists of model parts, namely the measurement model (outer model) and structural model (inner

model). The outer model aims to be able to assess the validity and reliability of the model and this outer model consists of four stages of testing, namely individual item reliability, internal consistency reliability, average variance extracted (AVE), and discriminant validity. This inner model analysis aims to see the relationship between latent variables. The inner model test consists of six stages of testing, namely testing the path coefficient ( $\beta$ ), coefficient of determination ( $R^2$ ), t-test using the bootstrapping method, effect size ( $f^2$ ), predictive relevance ( $Q^2$ ), and relative impact ( $q^2$ ).

## 2.3 Research Result

In this study, researchers analyzed data using the EUCS method to measure user satisfaction with the MyPertamina system. Furthermore, for calculating and processing data, researchers used the help of SmartPLS version 3.0 tools. The discussion of research results is used as material in providing recommendations for PT. Pertamina regarding the implementation of the MyPertamina system for the performance process so that it can be even better.

## 3. RESULTS AND DISCUSSION

### 3.1. Demographic Analysis Results

At this stage, the researcher analyzed questions regarding the profile of the respondents and the satisfaction of the MyPertamina application users to be able to produce a demographic analysis. The demographic information generated in this study includes gender, age, last education, occupation, domicile, length of internet use, length of use of MyPertamina, role of MyPertamina, and success status of MyPertamina. The following results of the demographic analysis will be shown in Fig 2 to Fig 8.

#### 1) Gender

Based on Fig 2 below, it shows that out of a total of 200 respondents in this study, it can be seen that female respondents, namely 54% or as many as 108 people, have a higher frequency than men who have 46% or as many as 92 people. This is because the MyPertamina application is a mobile payment application, while women's interest in using cashless payments is higher than men [20].

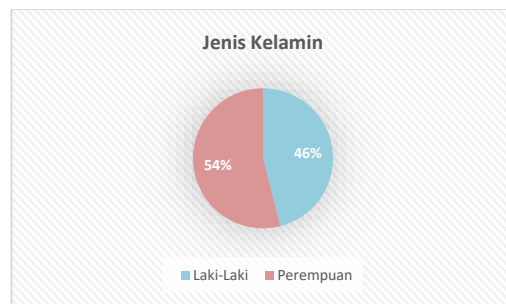


Fig 2. Gender chart

## 2) Age

Based on Fig 3 below, it can be seen that the age of most respondents is 26-32 years with a total of 103 people (50%). This number was followed by 64 respondents aged 18-25 years (31%), 24 respondents aged 33-40 years (12%), and 9 respondents aged > 40 years (7%). This is because the majority of MyPertamina users are workers with a productive age range, namely 26-32 years old.

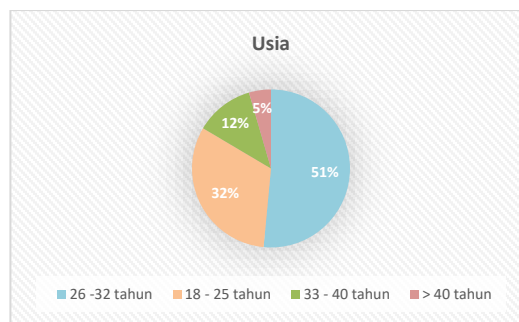


Fig 3. Age chart

## 3) Last Education

Based on Fig 4 it can be seen that the last education of the most respondents was Academy/Higher Education as many as 114 people (57%), then SMA/SMK/MA as many as 79 people (39%), and the lowest was SMP/MTS with 7 people (4%) . This is because MyPertamina users understand more about using a system with an Academy/Higher Education education, while for junior high school education, users find it more difficult to understand or are reluctant to use the system. College students are generally more accustomed to internet-based technology services and more educated than ordinary users [21].



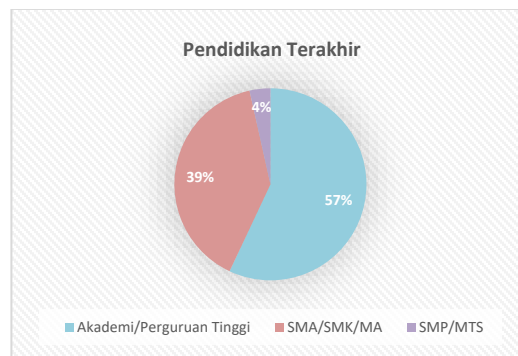


Fig 4. Last education chart

#### 4) Profession

Based on Figure 5 below, it can be seen that the most respondents' jobs were Private Employees with 73 people (36%), followed by Students with 42 people (21%), Entrepreneurial jobs with 28 people (14%), Teachers' jobs with 21 people (10%), 15 civil servants (7%), 11 housewives (6%), 7 people (4%) TNI/Polri, and 3 others (2%). This is because the majority of MyPertamina users are in the age range of 26-32 years, at that age, of course, there are more private workers.

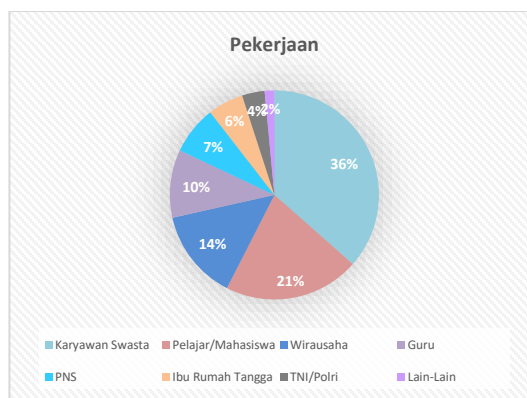


Fig 5. Profession chart

#### 5) Domicile

Based on Fig 6 below, namely the domicile category, namely as many as 68 respondents live in Jakarta with a percentage of 34%, then as many as 46 respondents live in Tangerang with a percentage of 23%, as many as 40

respondents live in Depok with a percentage of 20%, as many as 34 respondents live in Bogor with a percentage of 17%, and as many as 12 respondents who live in Bekasi with a percentage of 6%. %. This is because Jakarta is an area that is required to register with MyPertamina to purchase Peralite BBM.

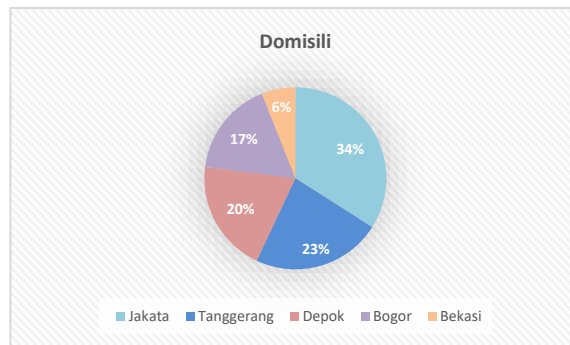


Fig 6. Domicile chart

#### 6) Term of Use of the MyPertamina Application

From Fig 7 it can be seen that the duration of system use with the highest frequency was < 6 months for 102 people (51%), then 6 – 11 months for 63 people (31%), and 1 – 3 years for 35 people (18%).

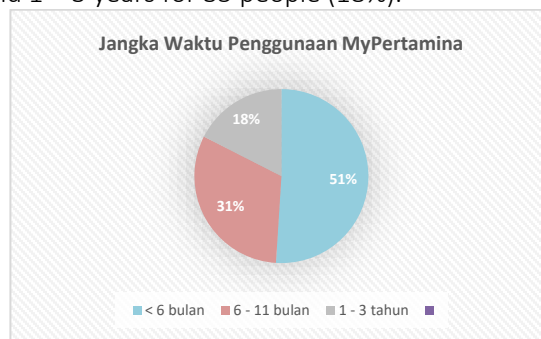


Fig 7. Term of use of the mypertamina application chart

#### 7) The Role of The MyPertamin Application

Based on Fig 8 below, it can be seen that the role of the system with the highest frequency is Self-Helping with a total of 78 people (39%), then Not Helping as many as 56 people (28%), Not Helping as many as 34 people (17%), Helping as many as 27 people (14%) and Very Helpful as many as 5 people (2%). This is

because MyPertamina users feel that this application has not been able to fully assist users in meeting their needs.

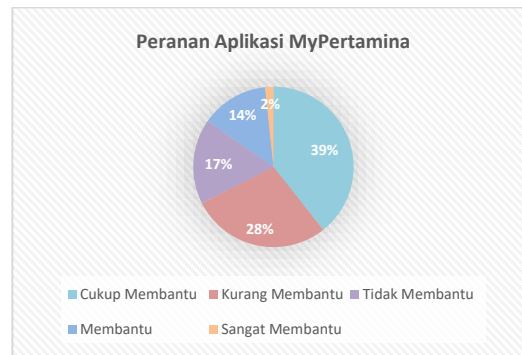


Fig 8. The role of the mypertamin application chart

### 3.2. Outer Model Analysis Results

Next, analysis of the measurement model (Outer Model) which consists of four stages of testing, namely: Individual Item Reliability, Internal Consistency Reliability, Convergent Validity, and Discriminant Validity.

#### 1) Individual Item Realibility

This test is used to validate the indicators for the variables reviewed based on the value of the standardized loading factor. This standardized loading factor can also describe the magnitude of a correlation between each indicator and its construct by looking at the outer loading value. This value will be acceptable if the value of the loading factor is above 0.7 which means that the indicator is said to be valid as an indicator that can measure constructs [22]. Regarding this matter, after testing on SmartPLS 3.0, it can be seen that all values for each indicator in this study have met the requirements, namely the value is more than 0.7. So that in this case the results of the loading factor test for all indicators are valid and meet the requirements for measuring constructs, which can be seen in table 1 below.

Table 1. Loading factor Results

	ACC	CON	EOU	EUS	FOR	TIM
ACC1	0.920					
ACC2	0.890					

	ACC	CON	EOU	EUS	FOR	TIM
ACC3	0.905					
ACC4	0.903					
CON1		0.856				
CON2		0.904				
CON3		0.888				
CON4		0.884				
EOU1			0.884			
EOU2			0.918			
EOU3			0.916			
EOU4			0.932			
EUS1				0.901		
EUS2				0.921		
EUS3				0.908		
FOR1					0.923	
FOR2					0.901	
FOR3					0.918	
FOR4					0.900	
TIM1						0.909
TIM2						0.881
TIM3						0.898
TIM4						0.917

## 2) Internal Consistency Reliability

This test is carried out by looking at the Composite Reliability (CR) results. The results of this test can show that there is a consistency value for each indicator in measuring its construct with the expected threshold above 0.7. The results of the composite reliability test are in table 2 below. From the table it can be seen that all variables have a composite reliability value above 0.7 [22]. So that this can mean that these variables have met the requirements and are valid to be used in this research model.

**Table 2.** Composite reliability test results

Variabel	Composite Reliability
<i>Accuracy</i>	0.947
<i>Content</i>	0.934
<i>Ease of Use</i>	0.952
<i>End User Satisfaction</i>	0.935

Variabel	Composite Reliability
<i>Format</i>	0.951
<i>Timeliness</i>	0.945

### 3) Convergent Validity

The next step is to test convergent validity by looking at the Average Variance Extracted (AVE) value. The AVE value describes the magnitude of the variance or diversity of manifest variables (indicators) that can be contained by latent variables (constructs). The minimum value used to indicate a good measure of convergent validity is 0.5.

**Table 3.** Average variance extracted (AVE) test results

Variabel	Average Variance Extracted (AVE)
<i>Accuracy</i>	0.818
<i>Content</i>	0.780
<i>Ease of Use</i>	0.832
<i>End User Satisfaction</i>	0.828
<i>Format</i>	0.829
<i>Timeliness</i>	0.812

### 4) Discriminant Validity

This test is carried out through two stages of cross loading, namely cross loading between indicators and Fornell-Lacker's cross loading. Cross loading of indicators is examined by comparing the correlation of indicators with their constructs and other block constructs. If the correlation between the indicator and the construct is higher than the correlation with other block constructs, this can indicate that the construct predicts block size better than other blocks. Next, check the Fornell-Lacker's crossloading by looking at the root value of AVE. The root value of AVE must be higher than the correlation between constructs and other constructs [22]. In table 4 below it can be concluded that the discriminant validity is good because it shows all the cross loading indicators that are given a yellow block on each variable has a higher value than the correlation with other block constructs.

**Table 4.** Discriminant validity (cross loading) test results

	ACC	CON	EOU	EUS	FOR	TIM
ACC1	0.920	0.840	0.858	0.864	0.841	0.872
ACC2	0.890	0.806	0.796	0.808	0.800	0.811

	ACC	CON	EOU	EUS	FOR	TIM
ACC3	0.905	0.806	0.825	0.836	0.782	0.850
ACC4	0.903	0.860	0.865	0.864	0.858	0.852
CON1	0.758	0.856	0.777	0.743	0.756	0.740
CON2	0.805	0.904	0.836	0.806	0.840	0.824
CON3	0.820	0.888	0.818	0.815	0.806	0.823
CON4	0.848	0.884	0.793	0.851	0.787	0.855
EOU1	0.822	0.812	0.884	0.817	0.802	0.821
EOU2	0.863	0.853	0.918	0.863	0.874	0.847
EOU3	0.835	0.806	0.916	0.832	0.869	0.820
EOU4	0.855	0.859	0.932	0.837	0.865	0.870
EUS1	0.863	0.815	0.869	0.901	0.861	0.855
EUS2	0.834	0.837	0.808	0.921	0.803	0.810
EUS3	0.847	0.838	0.827	0.908	0.805	0.860
FOR1	0.853	0.839	0.866	0.854	0.923	0.846
FOR2	0.817	0.819	0.853	0.804	0.901	0.812
FOR3	0.805	0.800	0.845	0.814	0.918	0.803
FOR4	0.829	0.830	0.838	0.821	0.900	0.845
TIM1	0.835	0.855	0.860	0.831	0.858	0.909
TIM2	0.842	0.811	0.849	0.818	0.860	0.881
TIM3	0.824	0.814	0.788	0.830	0.773	0.898
TIM4	0.854	0.835	0.823	0.858	0.787	0.917

Another discriminant validity test is looking at the AVE value by examining Fornell-Lacker's cross loading, namely comparing it with the AVE root value. The qualifying criterion is if the AVE root value is greater than the correlation value between constructs. The results can be seen in Table 5 which shows that the AVE root value is higher than the correlation between the construct and the other constructs.

**Table 5.** Discriminant validity (cross loading Fornell-Lacker's) test results

	ACC	CON	EOU	EUS	FOR	TIM
ACC	0.904					
CON	0.916	0.883				
EOU	0.925	0.913	0.912			
EUS	0.932	0.912	0.918	0.910		
FOR	0.908	0.903	0.934	0.905	0.910	
TIM	0.936	0.920	0.920	0.925	0.908	0.901

Based on Table 5 above, it shows that the AVE root value is higher than the correlation between the construct and the other constructs. So based on the results of the two-stage cross loading examination, it can be seen that there are no problems in the discriminant validity test.

### 3.3. Inner Model Analysis Results

In the inner analysis phase, this model is carried out through six stages of testing, which consist of testing the path coefficient ( $\beta$ ), coefficient of determination ( $R^2$ ), t-test using bootstrapping, effect size ( $f^2$ ), predictive relevance ( $Q^2$ ), and relative impact. ( $q^2$ ). The following is an explanation of this measurement which will be explained as follows:

#### 1) Path Coefficient ( $\beta$ )

This test is carried out by looking at the significance of the relationship between constructs. This can be seen from the path coefficient which can describe the strength of the relationship between constructs. Testing the path coefficient ( $\beta$ ) is carried out by looking at the threshold value above 0.1 where this can state that the intended path has an influence in this research model [22]. In Table 6 below it can be seen that of the 5 paths in the research model it shows a significant influence as shown in Table 6 below.

**Table 6.** Path coefficient test results

Variable Relationship	Path Coefficient ( $\beta$ )
ACC → EUS	0.331
CON → EUS	0.162
EOU → EUS	0.155
FOR → EUS	0.108
TIM → EUS	0.226

#### 2) Coefficient of Determination (R-Square)

This test was carried out to explain the variance of each endogenous target variable (variables that are considered to be influenced by other variables in the model) with the measurement standard used being 0.67 which is stated as strong, 0.33 which is considered moderate, and 0.19 or below indicates weak variance rates [22].

**Table 7.** Coefficient of determination (r-square) test results

<b>Varibel Endogen</b>	<b>Coefficient of Determination (R-Square)</b>
<i>End User Satisfaction</i>	0.905

Based on Table 7, it can be seen that the Coefficient of Determination test results, where the R-Square of EUS has a value of 0.905. So this can be interpreted that all exogenous variables namely ACC, CON, EOU, FOR, TIM strongly explain (90%) the variance of EUS.

### 3) T-test

This test was carried out using the bootstrapping method, namely by using a two-tailed test with a significance level of 5% to test the research hypotheses. These hypotheses will be accepted if they have a t-test greater than 1.96 [22]. Table 8 shows that there are 4 accepted hypotheses and 1 rejected hypothesis.

**Table 8.** T-test results

<b>Hubungan Antar Variabel</b>	<b>T-test</b>
<i>Accuracy → End User Satisfaction</i>	3.931
<i>Content → End User Satisfaction</i>	2.472
<i>Ease of Use → End User Satisfaction</i>	2.097
<i>Format → End User Satisfaction</i>	1.352
<i>Timeliness → End User Satisfaction</i>	3.017

Based on Table 8 above, it shows that there are 4 accepted and 1 hypothesis rejected because it has a t-test value > 1.96, namely ACC→EUS, CON→EUS, EOU→EUS, TIM→EUS. The following is a picture of the structural model components.



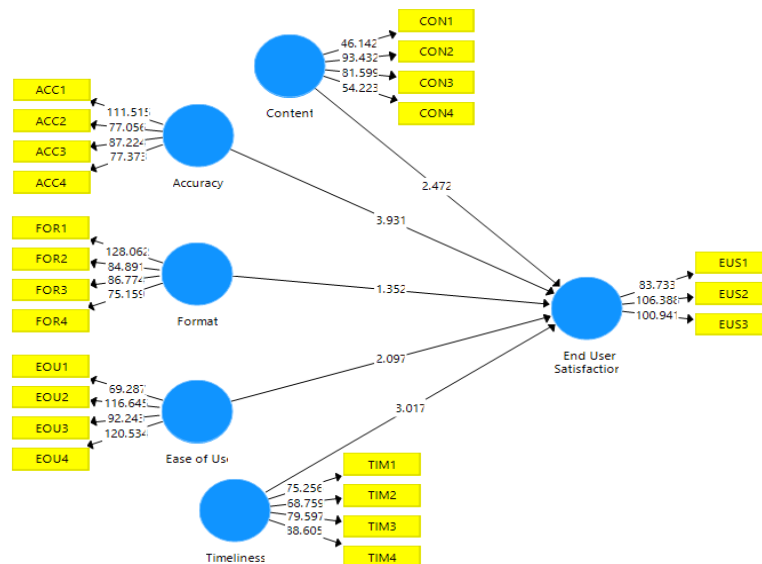


Fig 9. The results of the inner model analysis

4) Effect Size ( $f^2$ )

At this stage testing is carried out to determine the influence of certain variables on other variables in the model structure with a threshold value of around 0.002 for small effects, 0.15 for medium effects, and 0.35 for large effects [22]. Table 9 below shows the results of the  $f^2$  test for the 7 routes in this study. The result is that 6 paths have a small effect and 1 path has a medium effect.

Table 9. Effect size ( $f^2$ ) test results

Hipotesis	Jalur	$f^2$			Analisis $f^2$
		R <sup>2</sup> -in	R <sup>2</sup> -ex	$\Sigma f^2$	
H1	ACC → EUS	0.905	0.885	0.210	Menengah
H2	CON → EUS	0.905	0.903	0.021	Kecil
H3	EOU → EUS	0.905	0.905	0.000	Kecil
H4	FOR → EUS	0.905	0.904	0.011	Kecil
H5	TIM → EUS	0.905	0.901	0.042	Kecil

5) Predictive Relevance ( $Q^2$ )

This test is carried out using the blindfolding method to be able to provide evidence that certain variables have predictive relevance with other variables.

The threshold value used in this measurement is above zero (0) [22]. Table 10 below shows that all variables have a predictive relationship with values above zero.

**Table 10.** Predictive relevance test results

Varibel Endogen	Q
<i>End User Satisfaction</i>	0.738

#### 6) Relative Impact ( $q^2$ )

This test was carried out using the blindfolding method to be able to measure the relative effect of a predictive linkage of a particular variable with other variables with a threshold value of 0.02 for small effect, 0.15 for medium effect, and 0.35 for large effect [22]. Table 11 below shows the results of the  $q^2$  test for the 7 routes in this study. The result is that the 7 pathways have little effect.

**Table 11.** Relative impact ( $q^2$ ) test results

Hipotesis	Jalur	$q^2$		$\sum q^2$	Analisis $q^2$
		$Q^2$ -in	$Q^2$ -ex		
H1	ACC → EUS	0.738	0.731	0.027	Kecil
H2	CON → EUS	0.738	0.737	0.004	Kecil
H3	EOU → EUS	0.738	0.738	0.000	Kecil
H4	FOR → EUS	0.738	0.740	0.008	Kecil
H5	TIM → EUS	0.738	0.735	0.011	Kecil

This study aims to determine user satisfaction of the MyPertamina application and find out what factors can influence user satisfaction of the MyPertamina application by using the End User Computing Satisfaction (EUCS) model so that it can be seen that there is a successful implementation of an information system in the MyPertamina application. The results of several stages of testing show that the factors that can affect user satisfaction of the MyPertamina application are Content, Accuracy, Ease of Use, and Timeliness. By using a two-tailed test with a significance level of 5% to test the research hypotheses. These hypotheses will be accepted if they have a t-test greater than 1.96, it can be seen from the 7 hypotheses that have been proposed, indicating that there are 4 hypotheses accepted, namely Content → End User Computing Satisfaction (EUS), Accuracy → EUS, Ease of Use → EUS, and Timeliness → EUS, because based on the t-test, the four pathways are accepted. And also from the results of the path coefficient ( $\beta$ ) testing the five paths are significant because they have a t-test value > 1.96.

This can be interpreted that Content, Accuracy, Ease of Use, and Timeliness have proven to have a significant effect on measuring the level of user satisfaction with the MyPertamina application. Where this is different from previous similar research conducted by [23], which resulted in 3 accepted hypotheses, namely format, content, ease of use which showed a significant influence on the satisfaction of DANA application users. The researcher believes that the differences in the results of this study are a natural thing, considering that there are differences in research objects, samples, research instruments, as well as limitations and constraints during research implementation which are also the main triggering factors that can influence differences in research results. The limitations of this study are that the population used in the study is only users of the MyPertamina application who live in Jabodetabek and are at least 18 years old.

## 4. CONCLUSION

From the 200 data respondents who have obtained, it can be seen that as many as 78 respondents (39%) feel quite helped by the MyPertamina application. Based on the tests that have been carried out, it can be seen that the factors that can affect user satisfaction of the MyPertamina application are Content, Accuracy, Ease of Use, and Timeliness. Furthermore, from the 7 hypotheses that have been proposed, it shows that there are 4 hypotheses that are accepted namely Content→End User Computing Satisfaction (EUS), Accuracy→EUS, Ease of Use→EUS, and Timeliness→EUS. This can be interpreted that Content, Accuracy, Ease of Use, and Timeliness have proven to have a significant effect on measuring the level of user satisfaction with the MyPertamina application. And he rejected 1 of the 5 hypotheses, namely Format→End User Computing Satisfaction because based on the t-test, the path was rejected. Therefore, it can be concluded that the format does not directly affect user satisfaction.

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