

## Analysis Acceptance System SMK PAS UTAUT Model Using (Case Study: SMK Palembang)

Eka Lismayanti, Firdaus, Yesi Novaria Kunang

Master of Information Technology  
Bina Darma University  
e-mail:iis.khun@yahoo.com

### *Abstract*

*This study aims to determine behavioral intentions in receipt of SMK PAS system by using the UTAUT model , the phenomenon underlying this research is not optimal SMK PAS system acceptance by the Principal , the authorities concerned and the data processing team in the process of administrating PAS vocational school , socialization where the system SMK PAS is not optimal , so not maximum utilization measurability and yet the impact of using SMK PAS system . The study is in the processing of the data using SPSS version 20 by using the UTAUT model has measurement variables , namely : Expectanc Performance , Effort Expectancy , Social Influence of the implementation of the PAS system acceptance SMK SMK in Palembang. The results showed that the variable Performance Expectancy and Social Influence positive effect on the implementation of the PAS system acceptance SMK while effort expectancy variable is not a positive influence on the implementation of SMK PAS system acceptance.*

**Keywords :** *Computer Network, VLAN, Packet Tracer 5.0*

## 1 INTRODUCTION

One effort to improve the quality of educational services , the Directorate PSMK held a workshop on the theme " Dissemination of Information Systems and Vocational Education ( SI - CMS )" , by inviting ministries of education level of provinces in Indonesia . One resulting from the workshop is the idea of building a management information system at the school level of education Secondary education . Education management information systems school level is called School Application Package ( PAS ) . The idea to build PAS-SMA/SMK not solely intended only to improve the quality of data obtained and the information generated by the DIT . PSMA / vocational and education departments at the provincial and district / city , but is also intended to improve the quality of management education that is run every SMA / SMK in Indonesia . Therefore , dirumuskanlah PAS-SMA/SMK development goals and objectives as follows.

The development of information and communication technology ( ICT ) is very rapid impact on the education system in Indonesia that is improving the quality of education .

Indicators of increasing the quality of education is not only seen from the output results ; teaching students , but also improving the quality of school services to all its stakeholders . This study contains a review of the behavior of the user ( users ) of the acceptance of PAS system SMK . This study uses a model framework that adopts the model UTAUT ( Unified Theory of Acceptance and Use of Technology Model ) . UTAUT model is a model of information technology acceptance of a relatively newly developed based on theory and previous models , including theory of reason action ( TRA ) , theory of planned behavior ( TPB ) , technology acceptance model ( TAM ) and task - technology fit theory . UTAUT model to test the determinants of user acceptance and usage behavior consisting of : performance expectations ( performance expectancy ) , effort expectancy ( effort expectancy ) , social influence , and facilitating conditions , and found that these four behaviors contribute to the use of either direct as well as through behavioral intention . In this study the influence of performance expectancy will be discussed , effort expectancy and social influence on the acceptance of PAS system SMK Palembang . In addition , the results of this study can also be a measure of system utilization in a variety of SMK Negeri PAS Palembang and the dominant factors affecting the acceptance of the PAS system so that it can be taken into consideration , the model of thought in the understanding of information technology.

The purpose of this study is :

1. To determine the influence of performance expectancy on the acceptance of PAS system ( School Application Package ) SMK .
2. To determine the influence of effort expectancy on the acceptance of PAS system ( School Application Package ) SMK .
3. To determine the influence of social influences on the acceptance of PAS system ( School Application Package ) SMK .
4. To determine the influence of performance expectancy , effort expectancy and social influence on the implementation of the PAS system acceptance ( School Application Package ) SMK.

Based on the above background , the discussion of the problems in this study is limited in scope : the analysis of the influence of performance expectancy , effort expectancy , social influence on the implementation of the systems admission School Application Package ( PAS ) SMK by measuring user acceptance in the management team of PAS SMK City Palembang.

### 1.1 Mindset

In the framework of this research will Examining the determinants of user acceptance and usage behavior in the UTAUT model , namely performance expectancy ( X1 ) , effort expectancy ( X2 ) , and social influence ( X3 ) on the implementation of the systems admission School Application Package ( PAS ) SMK ( Y ) at SMK Palembang . Here is a framework in this study.

### 1.2 Research Hypothesis

The hypothesis in this study are as follows :

Table 1: Cronbach 's Alpha for Each Construct

Konstruk	Cronbachs Alpha	keterangan
<i>Performance Expectancy</i>	0,985	<i>realible</i>
<i>Effort Expectancy</i>	0,945	<i>realible</i>
<i>Social Influence</i>	0,919	<i>realible</i>
Implementasipenerimaansistem PAS SMK	0,940	<i>realible</i>

1. Performance Expectancy ( PE ) effect on the implementation of PAS System Acceptance SMK ( IPSPASSMK ) at SMK Palembang.
2. Effort Expectancy ( EE ) affect the implementation of PAS System Acceptance SMK ( IPSPASSMK ) at SMK Palembang.
3. Social Influence ( SI ) effect on the implementation of PAS System Acceptance SMK ( IPSPASSMK ) at SMK Palembang.
4. Performance Expectancy ( PE ), Effort Expectancy ( EE ), and Social Influence ( SI ) effect on the implementation of PAS System Acceptance SMK ( IPSPASSMK ) at SMK Palembang.

## 2 RESEARCH METHODOLOGY

### 2.1 Overview of Objects and Outcomes Research

#### 2.1.1 Testing results of the questionnaire

Validity test is used to measure whether a valid or invalid questionnaires . A questionnaire as valid if the questions on the questionnaire but to reveal something that will be measured by the questionnaire . Significance test is done by comparing the value of r count r value table for degree of freedom (  $df = nk$  ), in this case n is the number of samples and k is the number of constructs . In this study the amount calculated dengan40  $df - df 4$  or 36 with 0:05 alpha obtained r table 0.3202 . If the count r ( for r each item of data shown in column Corrected Item - Total Correlation ) is greater than r table and the value of r is positive , then the item is declared invalid or questions . Validity test results can be seen in Table 1.

Based on the results shown in the table above, if the value of the Cronbach Alpha coefficients to construct more than 0.5, then it can be said that the instruments used to measure these constructs . The entire construct can be said to be acceptable because more qualified than or equal to 0.50 ( Hair et . Al 1998).

#### 2.1.2 Multiple Regression Analysis

- Normality Test

The purpose of the normality test is to determine whether the regression model , dependent variable and independent variables both have a normal distribution or not. As

per a study made note if the data spread around the normal line and follow the direction of the diagonal , then the regression model to meet the assumptions of normality , regression models are normal. Show in Figure 1.

- Linearity Test

Linearity test means the relationship between the independent variable X and the dependent variable Y is linear . If the F value is greater than 0.05 then the hypothesized relationship linearitas acceptable.

- Multicollinearity Test

Means multicollinearity between the independent variables included in the regression model has a linear relationship is perfect or near perfect . Multicollinearity test method is to look at the value of tolerance and the inflation factor ( VIF ) in the regression model.

If the VIF value is smaller than 0.1 or VIF value greater than 10 then there is multicollinearity , because the VIF value is less than 10 then the regression equation does not meet the criteria there is multicollinearity.

- Autocorrelation test

To test the views of the value of Durbin Watson . Regression model is said there is no autocorrelation if the value of the Durbin Watsonnya ( DW ) is between 1.55 to 2.46 . Because the value of 2.396 Durbin Watson then said no autocorrelation.

- Test Heteroskedasitas

Regression heteroskedasitas should not happen , this is shown by looking at the pattern of dots on the graph regression . If the points do not form a clear pattern does not occur then it can be said heteroskedasitas

The results of the above regression equation formulated to estimate the dependent variable regression using all independent variables are as follows :

$$Y = 10.168 - 0.070X1 + 0.021X2 + 0.976X3 + e \quad (1)$$

From the regression equation above can be explained that the independent variable Expectacy Effort ( X2 ) and Social Influence ( X3 ) has a direct effect on the dependent variable implementation of the PAS system acceptance CMS ( Y ) . This influence shows that any increase in the independent variable will increase the dependent variable also assuming that the other independent variables constant . While variable Expectacy Performance ( X1 ) the effect of different directions meaning that any increase in the independent variable will decrease the dependent variable

## 2.2 Hypothesis Testing

Proving the hypothesis using two (2) test , namely : t-test ( Partial ) to see the effect of each partial independent variable on the dependent variable , and F test ( Simultaneous ) to see the effect of simultaneous two independent variables on the dependent variable.

Table 2: Linearity Test Table

ANOVAa						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	183.204	3	61.068	<b>41.66</b>	.000b
	Residual	52.771	36	1.466		
	Total	235.975	39			

Table 3: Multicollinearity Test

Model	Coefficientsa									
	Unstandardized Coefficients		Standardized Coefficients		t	Sig.	Correlations			Collinearity Statistics
	B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	10.168	4.038		2.518	0.016				
	PE	-0.07	0.106	-0.06	-0.658	0.515	0.355	-0.109	-0.052	0.74
	EE	0.021	0.18	0.01	0.118	0.906	0.323	0.02	0.009	0.805
	SI	0.976	0.099	0.903	9.902	0	0.88	0.855	0.78	0.747

### 2.2.1 t-test ( partial )

From the analysis of the data that has been done, it can be proved that the hypothesis that there is seen from the table to the variable t Performance Expectancy is smaller than the table t value -2.024 , meaning that there is a significant effect between the variable to variable implementation of Performance Expectancy PASSMK . Effort Expectancy value of the variable t is 0.118 ; t table value it is inferred parial Effort Expectancy variables do not significantly affect the implementation of variable acceptance CMS PAS system . Social Influence variable t value is 9.902 ; t table value then inferred Social Influence parial variables significantly influence the implementation of variable acceptance CMS PAS system.

### 2.2.2 Test F ( Simultaneous )

The F - count ( Fb ) or ( p ; 0.05 ) aims to examine whether the variable Performance Expectancy , Effort Expectancy variables and variable Social Influence jointly have a significant effect on the variable acceptance Implementation CMS PAS system . Based on this analysis it can be concluded for the F test results obtained in this study H0 is rejected and Ha accepted meaning ririskiky together variable Performance Expectancy , Effort Expectancy variables and variable Social Influence variables have a significant effect on the variable implementation of CMS PAS system acceptance.

## 3 RESULTS AND DISCUSSION

Based on the results of empirical testing that has been done by the researchers found that :

1. Effort expectancy did not significantly influence the implementation of CMS PAS system acceptance.

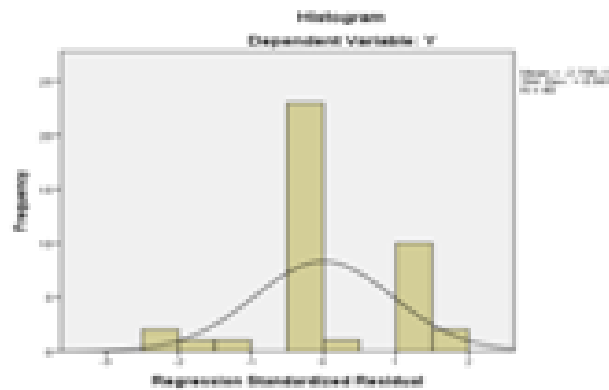


Figure 1: Graph Normal Q - Q

2. The findings of the study showed that performance expectancy had a significant influence on the implementation of the CMS PAS system acceptance. Respondents considered that by using CMS PAS system can help to get the performance benefits of the performance dipekerjaannya expectancy.
3. Social Influence has a significant impact on the implementation of CMS PAS system acceptance. The results of this test indicate that the social environment around the respondents as professional colleagues, principals and other school -related parts may affect the parties to use the CMS PAS systems in data maintenance and administration of the school.

#### 4 CONCLUSION

The conclusions obtained in this study are as follows :

1. This study received the Hypothesis 1 proposed that performance expectancy variables affect the implementation of the CMS acceptance PAS system, so it can be concluded that the PAS system SMK keberadaa very supportive and can improve the performance of the administrative functions of the school especially in the activities of data collection , reporting and facilitate the school in providing data or information required by the other party.
2. This study received a Hypothesis 2 proposed that effort expectancy variable is not positive and significant impact on the implementation of CMS PAS system acceptance, so it can be concluded that this variable does not affect despite most respondents have mastered the technology of information and communication at a relatively high level or with the word other skills / experience using computers long enough and relatively young age ( not too old ).
3. This study received the Hypothesis 3 proposed that social variables influence positive and significant impact on the implementation of CMS PAS system acceptance, so it can

be concluded that the results of this test indicate that the social environment around the respondents as related parties, teachers, principals affecting the deputy head school and chairman of competence to support the data related to CMS PAS.

4. This study received a Hypothesis 4 proposed that UTAUT positive and significant impact on the implementation of CMS PAS system acceptance, so it can be concluded that the variable performance expectancy, effort expectancy, social influence supported in this study to determine user acceptance and usage behavior on the implementation of the system acceptance CMS PAS.

#### 4.1 Suggestion

As for the suggestions given in this study are as follows :

1. Need more on the streamline in charging, because that has always been done in 2 times the activity, ie the data is filled through a new local after perfect uploads.
2. The existence of guidelines or standards-compliant application instructions provided by the manufacturer of the application, so that data processing is not confusion.
3. Menu in the application of PAS SMK too much, so that too much data processing to provide data repeatedly.
4. Support policies and productive atmosphere that is motivated by the Principal, Head of the Department of Education and the Director General of Education is formed on the entire vocational commitment in Palembang optimally.

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