

Implementation IBS Core Banking System with UTAUT Model to Understand Behavioral Intention

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Abstract—The goal of this study to know the influence Performance Expectancy, Effort Expectancy, Social Influences and Facilitating Conditions on Behavioral Intention in utilization application IBS Core Banking System at PT. BPR BKK Wonogiri. Population and sample in these study sum 49 responders with a census from response to existing questionnaires. Analyzed data used the multiple linier regression with validity reliability test, t-test, F-test, and coefficient determination. The result this study shows that effort expectancy and facilitating conditions have a positive and significance on behavioral intention, but performance expectancy and social influences have no significance effect on behavioral intention.

Keyword: *Performance Expectancy, Effort Expectancy, Social Influences, Facilitating Conditions, Behavioral Intention*

I. INTRODUCTION

The embodiment of the best performance according to the PD. BPR BKK Wonogiri adheres to the principles of openness and prudence. Various products and facilities owned by PD. BPR BKK WONOGIRI continues to grow and develop with 16 networks with a composition: 12 branch offices, 4 cash offices spread across Wonogiri Regency.

PT. BPR BKK Wonogiri (Perseroda) is the result of a merger of 12 PD. BPR-BKK located in Wonogiri Regency. Based on the Decree of the Deputy Governor of BI No. 7/17 / KEP.DpG / 2005 concerning the granting of a merger permit and the Central Java Governor Decree No.503 / 78/2005 regarding the approval of a merger permit. PD BPR-BKK Wonogiri (Perseroda) as a result of the merger began operating January 2, 2006 and was inaugurated by the Governor of Central Java, January 18, 2006. OJK Decree No.S-1025 / KO.0301 / 2019 November 14, 2019 Old Law to New Legal Entities. As of November 14, 2019 using the name PT BPR BKK Wonogiri (Perseroda).

PT BPR BKK Wonogiri (Perseroda) is committed to being more professional in helping the community's economy. Efforts to help the community through the Simple Ayah Sukses program have opened opportunities for the community to become foster parents for orphans. A total of

213 orphans in Wonogiri Regency have received donors and so they can continue their schooling.

The implementation of the Core Banking System is intended to become a Professional Banking and Good Corporate Governance Period. The Core Banking System is a core system used by banks in servicing all banking transactions which is integrated between front office (transaction recording) and back office (transaction processing) activities and has several other management information system functions.

User interaction in the use of detailed banking financial services information system applications can be a problem in itself, especially the lack of basic understanding of information technology and banking operational systems. A complex system is of course very good and beneficial for organizations to make policies and run bank operations, but there are still many levels of benefits from the system that cannot be maximized as planning and financial control / organization. A system is not perfect, so system performance sometimes becomes a problem, such as the unstable Core Banking System in system processes and inaccurate data, which sometimes creates a lack of confidence in the Core Banking System being used.

UTAUT is a model to explain user behavior towards information technology [1]. The UTAUT model shows that behavioral intention can be influenced by performance expectancy, effort expectancy, social influence, and facilitating conditions. This study uses the Unified Theory of Acceptance and Use of Technology (UTAUT) to explain the behavioral interest in using information technology.

Performance Expectancy, namely the level of an individual's confidence that using a system can help and provide benefits. In doing work, someone will use a system if the system is able to provide benefits in the payments they make so that it can cause an intention to use the system or technology. Someone who feels that their work is facilitated by using a system will have an interest in utilizing the system and using it sustainably. Information systems are able to provide positive things in their use when the information system will make it easier for someone to improve their performance [2]. Research Venkatesh et al. shows

performance expectations have a positive and significant effect on interest in using a system.

UTAUT has been employed at a research [3]. research on behavioral intentions in the use of social media. [4]; [5] Shows that performance expectancy (PE), effort expectancy (EE), facilitating conditions (FC) and social influence (SI) impact use intention. Research on the application of UTAUT related to the intention of adoption of mobile payments [6]; [7]; [8].

Research [6 - 15] showed a significant positive relationship between Performance Expectancy and behavior intention..

Effort expectancy is the level of ease related to system use. Ease of operating the system can affect a person's intention to use the system or technology. Someone will use a system if they feel the system can be understood easily.

Research [6]; [9]; [10]; [12]; [15] show that there is a significant positive influence on the effort expectancy variable on behavior intention. Relevant research was conducted by [11]; [13]; [14] show that there is an insignificant influence on behavior intention.

Social influence is the importance of the social environment in influencing and convincing an individual to also use the new system. This means that one thing that affects a person's intention to use the system is if he gets advice from people around him, especially those closest to him.

Research by [6]; [11]; [12]; [13]; [14]; [15]; show that there is a significant positive effect of the Social Influence variable on intention to use (behavior intention). Relevant research from [10] shows the results of the insignificant influence of social influence on behavior intention.

Facilitating conditions is the level of an individual's confidence in the availability of infrastructure to support the use of the system [1]. Research by [6];[10]; [14] show that there is a significant positive effect of facilitating conditions on behavior intention. The relevant research was conducted by [12]; [13]; [15] showed the significant positive effect of facilitating conditions on behavior intention.

The intention to use (behavior intention) will be able to influence the behavioral variables to use a technology. The purpose of this study was to prove the effect of performance expectancy, effort expectancy, social influences, facilitating conditions on behavioral intention in PD. BPR BKK Wonogiri.

II. METHOD

Object and method

This explanatory research was conducted using employee of PT. BPR BKK Wonogiri with 49 respondents through questionnaires where from the questionnaires sent via google form which responded to 51, but 2 questionnaires did not meet the requirements because they were incomplete. Answers based on perceptions of employees of PT. BPR BKK Wonogiri related to performance expectancy, effort expectancy, social influences, facilitating conditions, behavioral intention.used the basic Likert scale. Analysis technique is used multiple linear regression, t-test, F test, and coefficient of determination, and classic assumptions.

Desain of study

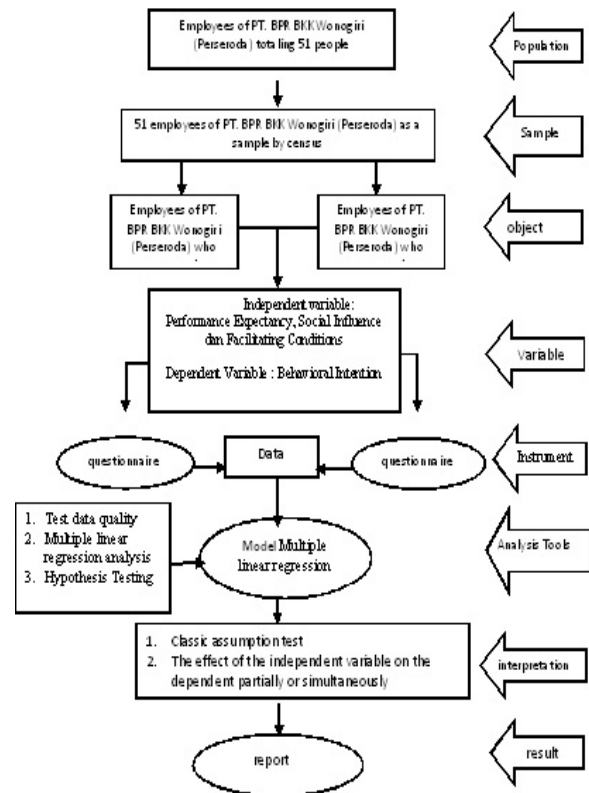


Figure 1. design of research

III. RESULT

Validity and Reliability Test

TABLE I. VALIDITY TEST OF PERFORMANCE EXPECTANCY

Item	Table Column Head		
	Corrected Item Total Correlation	r kritis	Status
1	0,704	0,300	Valid
2	0,773	0,300	Valid
3	0,676	0,300	Valid
4	0,330	0,300	Valid

TABLE II. VALIDITY TEST OF EFFORT EXPECTANCY

Item	Table Column Head		
	Corrected Item Total Correlation	r kritis	Status
1	0,858	0,300	Valid
2	0,717	0,300	Valid
3	0,868	0,300	Valid
4	0,840	0,300	Valid

TABLE III. VALIDITY TEST OF SOCIAL INFLUENCES

Item	Table Column Head		
	Corrected Item Total Correlation	r critis	Status
1	0,591	0,300	Valid
2	0,720	0,300	Valid
3	0,629	0,300	Valid
4	0,655	0,300	Valid

TABLE IV. VALIDITY TEST OF FACILITATING CONDITIONS

Item	Table Column Head		
	Corrected Item Total Correlation	r critis	Status
1	0,544	0.300	Valid
2	0,645	0.300	Valid
3	0,485	0.300	Valid
4	0,543	0.300	Valid

TABLE V. VALIDITY TEST OF BEHAVIORAL INTENTION

Item	Table Column Head		
	Corrected Item Total Correlation	r critis	Status
1	0,826	0.300	Valid
2	0,739	0.300	Valid
3	0,778	0.300	Valid

TABLE VI. RESULT OF RELIABILITY TEST

Variable	Alpha cronbach	Criterion	Status
PE	0,772	Alpha Cronbach > 0,60	Reliable
EE	0,921		Reliable
SI	0,815		Reliable
FC	0,745		Reliable
BI	0,879		Reliable

Source: data of research, 2017

Multiple Liner Regression

TABLE VII. RESULT OF MULTIPLE LINEAR REGRESSION

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2,956	2,268		-1,303	,199
	PE	,065	,167	,059	,390	,698
	EE	,308	,147	,290	2,090	,042
	SI	,042	,167	,039	,251	,803
	FC	,504	,154	,481	3,261	,002

a. Dependent Variable: BI

Source: Data analysis, 2021

Multiple Linear Regreesion :

$$SI = 0,59 PE + 0,290 EE + 0,039 SI + 0,481 FC + e$$

$$(0,698) \quad (0,042)** \quad (0,803) \quad (0,002)**$$

This study show that performance expectancy and social influences positive but not significant effect on behavior intention. effort expectancy and facilitating conditions have positive and significant effect on behavior intention.

T-test (Parameter Accuracy Test)

The t-test results show that the value of the variable performance expectancy is 0,390 with a significance level of 0.698 > 0,05. which means that the variable Performance Expectancy (PE) has a positive and insignificant effect on Behavior Intention (BI). The value t-test of the variable Effort Expectancy is 2,090 with a significance level of 0.042 < 0,05. which means that the variable Effort Expectancy (EE) has a positive and significant effect on Behavior Intention (BI). The value t-test of the variable Social Influences is 0,251 with a significance level of 0,803 > 0,05. which means that the variable Social Influences (SI) has a positive and insignificant effect on Behavior Intention (BI). The value t-test of the variable facilitating conditions is 3,261 with a significance level of 0.002 < 0,05. which means that the variable facilitating conditions (FC) has a positive and significant effect on Behavior Intention (BI).

Based on the results of the t-test in this study, it can be summarized in the following table

TABLE VIII. RESULT OF T-TEST

Model	Standardized Coefficients Beta	t	Sig.	Result
PE	,059	,390	,698	hypothesis is not proven
EE	,290	2,090	,042	hypothesis is proven
SI	,039	,251	,803	hypothesis is not proven
FC	,481	3,261	,002	hypothesis is proven

Source: data processing results, 2021

F-test

TABLE IX. RESULT OF F-TEST

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	86,098	4	21,524	11,466	,000 ^b
	Residual	82,596	44	1,877		
	Total	168,694	48			

a. Dependent Variable: BI

b. Predictors: (Constant), FC, EE, PE, SI

From the results of the model accuracy test (F-test), it shows that the value of F count is 11,466 with a significance level of 0.000 < 0,05. This means that all independent variables, namely performance expectancy, effort expectancy, social influences, facilitating conditions together or simultaneously have a significant effect on the dependent variable of behavior intention.

The coefficient of determination

TABLE X. COEFFICIENT OF DETERMINATION
Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,714 ^a	,510	,466	1,37010

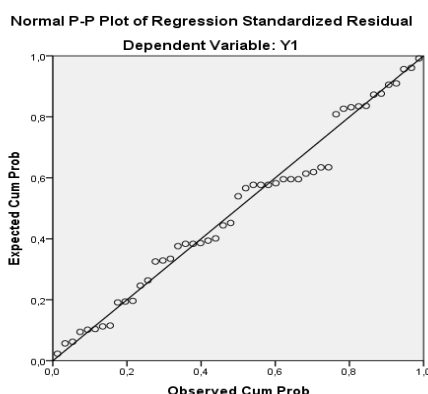
a. Predictors: (Constant), X4, X2, X1, X3

b. Dependent Variable: Y1

The value of Adjusted R Square (Adjusted R²) is 0.466. This means that the determination of the variable Performance Expectancy, Effort Expectancy, Social Influences, Facilitating Conditions can explain Behavioral Intention by 46.0% while the remaining 53.4% is explained by variables outside the model.

Classic Assumptions

1. Normalitas test



From the normal probability plots graph above, it can be seen that the dots spread coincide around the diagonal line and this shows that the residuals are normally distributed.

2. Otorrelation test

TABLE XI. RESULT OF OTOCORRELATION TEST
Model Summary^b

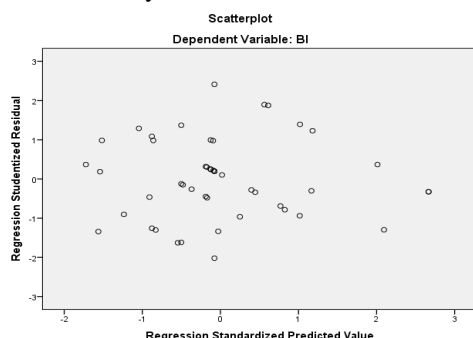
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,714 ^a	,510	,466	1,37010	2,455

a. Predictors: (Constant), FC, EE, PE, SI

b. Dependent Variable: BI

The Durbin Watson (DW) value from the data analysis obtained was 2.455 which is located between 1.5 and 2.5 so there is no autocorrelation.

3. Heteroskedasticity test



From the scatterplots graph above, it can be seen that the points spread randomly (randomly) either above or below the number 0 on the Y axis. So it can be concluded that there is no heteroscedasticity in the regression model.

4. Multicollinearity Test

TABLE XII. RESULT OF MULTICOLINIERITY TEST

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
PE	,481	2,077
EE	,579	1,728
SI	,450	2,223
FC	,512	1,955

The value of the VIF for each variable is less than 10, so it can be concluded that there is no multicollinearity.

IV. CONCLUSION

Result in this research show 1) performance expectancy has positive effect but insignificant on behavior intention with a significance level of $0.698 > 0,05$, 2) effort expectancy has positive effect and significant on behavior intention with a significance level of $0.042 < 0,05$, 3) social influences has positive effect but insignificant on behavior intention with a significance level of $0.803 > 0,05$, 4) facilitating conditions has positive effect and significant on behavior intention with a significance level of $0.002 < 0,05$.

The value of F count is 11,466 with a significance level of $0.000 < 0,05$. This means that all independent variables, namely performance expectancy, effort expectancy, social influences, facilitating conditions together or simultaneously have a significant effect on the dependent variable of behavior intention.

The value of Adjusted R² is 0.466. It's means that the determination of the variable performance expectancy, effort expectancy, social influences, facilitating conditions can explain behavioral intention by 46.0% while the remaining 53.4% is explained by variables outside the model.

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