



# The influence of perceived usefulness and perceived ease of use on behavioral intention with TAM approach to users of research management information systems

Liestya Padmawidjaja

School of Business and Management, Universitas Ciputra Surabaya

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## ABSTRACT

Along with the increasingly complex and broad scope of research implementation in tertiary institutions, so the development of a research and community service management system based on information and communication technology. The system is called the Research and Community Service Management System. The purpose of this study was to determine the perceived usefulness (PU), perceived ease of use (PEU) and behavioral intention (BI) of research lecturers who use the Research and Community Service Management System at a private university in Java, Indonesia and to determine the perceived influence usefulness (PU), perceived ease of use (PEU) on behavioral intention (BI) in research lecturers who use the Research and Community Service Management System in one of the Private University in Java , Indonesia . This research is a quantitative study using descriptive data analysis and multiple linear regression. The respondents in this study amounted to 66 research lecturers using the Research and Community Service Management System at a private university in Java, Indonesia using a simple random sampling method. The results of this study indicate that perceived usefulness (PU) is at 72.95% in the "high" category, perceived ease of use (PEU) is at 69.92% in the "above average" category, and behavioral intention (BI) is at a percentage of 70.5% in the "high" category, as well as perceived usefulness (PU) and perceived ease of use (PEU) partially and jointly affect behavioral intention (BI) in research lecturers using Research and Community Service Management Systems in one of the Private University in Java , Indonesia

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### Corresponding Author:

Liestya Padmawidjaja

School of Business and Management,

Universitas Ciputra Surabaya

CitraLand CBD Boulevard, Surabaya, Jawa Timur, Indonesia 60219.

Email: [Lpadmawidjaja@ciputra.ac.id](mailto:Lpadmawidjaja@ciputra.ac.id)

## INTRODUCTION

Based on Law Number 12 of 2012, Higher Education is required to implement the Tridharma of Higher Education, namely conducting education, research, and community service. In line with the explanation in the Regulation of the Minister of Research, Technology and Higher Education of the Republic of Indonesia Number 44 of 2015 concerning National Standards for Higher Education, it is

explained that what is meant by National Standards for Higher Education are units that include National Education Standards, plus National Research Standards, and Standards National Community Service. In this Ministerial Regulation what is meant by National Research Standards are the minimum criteria regarding the research system in tertiary institutions which apply throughout the jurisdiction of the Unitary State of the Republic of Indonesia. To meet the National Research Standards, each Tertiary Education Institution is expected to be able to manage research activities that meet the following standards, namely research results standards; research content standards; standard research process; research assessment standards; researcher standard; standard of research facilities and infrastructure; research management standards ; and research funding and funding standards. This is in accordance with the description in the Guidelines for Implementation of Research and Community Service X Edition 2016, Directorate of Research and Community Service (DRPM), that every tertiary institution is expected to be able to manage research that meets the standards described in the explanation of the National Research Standards as already mentioned on.

Along with the increasingly complex and broad scope of the implementation of research and community service in tertiary institutions, starting in 2012 the Institute for Research and Community Service (LPPM) from one of the university tall private , developing a research and community service management system based on information and communication technology (ICT). The system is called the Research and Community Service Management System. Research and Community Service grant activities which were previously carried out offline and conventionally by collecting all hard copies of proposals to LPPM . With online implementation through the Research and Community Service Management System, it is also possible to track research and community service activities (researcher track records, annual/multi-year evaluations, promised outputs, etc.) and conventional which is very difficult to trace.

With a Research and Community Service Management System, the process of submitting and selecting proposals, monitoring and evaluating implementation, final reports, budget use, and reporting of research results and community service can be managed properly so that transparency, efficiency and accountability can be guaranteed. The network architecture of the Research and Community Service Management System was built as a web-based information system so that it can be accessed by anyone, anytime and anywhere and provides data services used for integration needs with external information systems , so as to minimize time and distance constraints and maximizing the level of participation of the entire academic community. Users of the Research and Community Service Management System, namely the academic community, starting from Lecturers , Reviewers/ Assessors, Operators (LPPM) and Management. Since 2013, in carrying out research with grants from universities, university research lecturers tall it uses the Research and Community Service Management System to fill in daily notes, upload progress reports and annual/final reports, input budget usage and report research results or output seminar files.

This study wants to explain the behavior of lecturers or researchers who receive university grants in applying or using the Research and Community Service Management System. In explaining this behavior, researchers use the Technology Acceptance Model as a theoretical basis. According to Aditya & Wardhana, 2016; Davis, 1989; Murwani, 2008 explained that there are two reasons why people accept and reject information technology applications. For the first reason, people tend to use or not use information technology because they believe that information technology can help/complicate them in doing tasks better. This variable is referred to as perceived usefulness (PU). Second, potential users believe that the system is useful, but at the same time they also believe that the system is too difficult to use. This variable is referred to as perceived ease of use (PEU). (Aditya & Wardhana, 2016; Akdim et al., 2022; Taufik & Hanafiah, 2019; Vijayasathy, 2004).

The research aims to determine the perceived usefulness (PU) and perceived ease of use (PEU) of the Research and Community Service Management System among research lecturers at a private university in Java, Indonesia. Additionally, it seeks to investigate the influence of PU and PEU on the behavioral intention (BI) of users towards the system. By focusing on these objectives,

the study contributes to the application of the Technology Acceptance Model (TAM) in the context of research management information systems and community service, providing valuable insights into the factors influencing technology adoption in academic settings.

The findings of this research have several implications for the field of science. First, it provides valuable information for the improvement of Research and Community Service Management Systems, allowing developers and administrators to enhance system usability and functionalities based on users' perceptions and intentions. Second, the study's insights can inform academic decision-making regarding the implementation and investment in information and communication technology-based systems for research and community service management. Moreover, the research methodology, employing descriptive data analysis and multiple linear regression, serves as a reference for other researchers exploring similar topics or applying the TAM approach in different contexts.

Previous research that was used as the first reference in this research was research conducted by (Murwani, 2008) entitled *The Determinants of Using Websites as Learning Media in Marketing Concentration Courses (Theory of Reasoned Action and Theory of Technology Acceptance Perspectives)*. The purpose of his research is to verify the determinants of using websites as learning media based on Theory of Reasoned Action and Theory of Technology Acceptance. This study used a confirmatory survey design, the respondents studied in this study totaled 183 students with a random sampling technique. The previous research used as a second reference in this research was research conducted by (Teo, 2010) entitled *A path analysis of pre-service teachers' attitudes to computer use: applying and extending the technology acceptance model in an educational context*. The purpose of his research was to examine teachers' attitudes towards computer use. Previous research that is used as a second reference in this research is research conducted by (Aditya & Wardhana, 2016) entitled *Effects of Perceived Usefulness and Perceived Ease of Use on Behavioral Intention with the Technology Acceptance Model (TAM) Approach to LINE Instant Messaging Users in Indonesia*. The purpose of their research was to determine the effect of perceived usefulness (PU) and perceived ease of use (PEU) on behavioral intention (BI) in LINE instant messaging users in Indonesia. This research is a quantitative research with descriptive and causal data analysis. The respondents studied in this study were 400 LINE instant messaging users in Indonesia using incidental sampling techniques.

The variables in this study can be used as examples in applying the variables in this study in accordance with the original theory of the Technology Acceptance Model (TAM), including perceived usefulness (PU), perceived ease of use (PEU) and behavioral intention (BI). Information technology expert, namely Fred D. Davis, succeeded in developing a Theory of Technology Acceptance (TTA), which has another name, the Technology Acceptance Model (TAM) (Alagöz & Hekimoglu, 2012; Davis, 1989, 1993; Rahmadani & Hidayat, 2022; Susilawaty & Azzahra, 2023; Yanny & Afni, 2021; Yoon, 2018). TAM has a philosophical foundation that a person's behavior can be predicted through behavioral intentions which refer to a person's intention to use (or refuse) to use information technology (Davis, 1989; Murwani, 2008). In the TAM theory developed by Davis and adapted by Murwani, 2008 there are several variables used in this theory, including variables of perceived usefulness (PU), perceived ease of use (PEU), and Behavioral Intention (BI). TAM provides an explanation that the intention to use (or refuse) to use information technology (BI) is determined by 2 (two) factors, namely attitudes toward the behavior of using or refusing to use information technology (Attitude Toward behavior, denoted by A), and the benefits of information technology. (Perceived usefulness, which is denoted by PU). Furthermore, A is also determined by two factors, namely PU and perceived ease of use, which is denoted by PEU. Finally, PU is determined by PEU as a single factor (Davis, 1989).

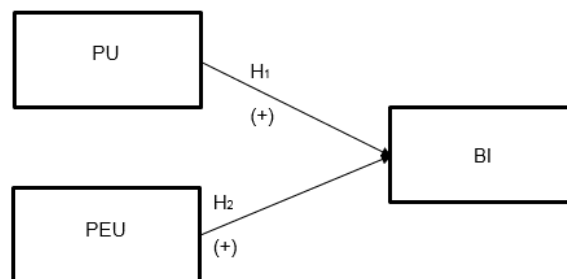
Summarized from Aditya, et al. (2016), the Technology Acceptance Model (TAM) is a model of user acceptance of the use of information technology systems. The Technology Acceptance Model (TAM) was proposed by (Davis, 1989) which is a development of behavioral theories such as Theory

of Reasoned Action (TRA) and Theory of Planned Behavior (TPB) by (Ajzen, 1991). TAM explains the causal relationship between beliefs (the benefits of a technology/information system and the ease of use) and behavior, as well as the goals/needs and actual use of the technology/information system. (Alagoz & Hekimoglu, 2012; Davis, 1993). According to (Aditya & Wardhana, 2016; Davis, 1989) usefulness is the level of a person's belief that the use of a particular system will improve his job performance. Perceived usefulness is defined as the usability of a technology so that if the usability of a technology is doubtful, no one's intention will appear to use it. According to (Aditya & Wardhana, 2016; Davis, 1989) perceived ease of use is defined as the extent to which a person believes that using a technology will be free of effort. Perceived ease of use is based on the extent to which potential users expect the new system to be used free of difficulties (Aditya & Wardhana, 2016; Atshari & Wicaksana, 2023; Davis, 1989; Yoon, 2018).

According to (Aditya & Wardhana, 2016; Agarwal & Karahanna, 2000) behavioral intention is a person's desire (interest) to perform a certain behavior. Someone will perform a behavior (behavior) if they have the desire or interest (behavioral intention) to do so. Interest can also indicate doing a behavior in the future and repeating it at a later date. The results of previous research show that behavioral intention is a good predictor of technology use by system users. In addition, there is a strong correlation between behavioral intentions and actual behavior (Aditya & Wardhana, 2016; Vijayarathy, 2004).

## RESEARCH METHOD

This study examines the effect of perceived usefulness (PU) and perceived ease of use (PEU) which have a significant effect on behavioral intention (BI) as shown in Figure 1 below. The research methodology is quantitative, and descriptive statistics with multiple linear regression techniques are used for data analysis.



**Figure 1.** Research framework model, source: adapted from tam (Aditya & wardhana, 2016; agarwal & karahanna, 2000; davis, 1989; murwani, 2008)

Referring (Alassafi, 2022; Alyoussef, 2022; Caffaro et al., 2020; Daragmeh et al., 2021; Doanh et al., 2022; Murwani, 2008; Song et al., 2022; Yoon, 2018) perceived usefulness (PU) can be interpreted as the usefulness of the Research and Community Service Management System felt by research lecturers, perceived ease of use (PEU) can be interpreted as the ease of use of the Research and Community Service Management System that felt by research lecturers, and behavioral intention (BI) can be interpreted as the intention of research lecturers to use the Research and Community Service Management System.

Referring to (Alassafi, 2022; Alyoussef, 2022; Caffaro et al., 2020; Daragmeh et al., 2021; Doanh et al., 2022; Murwani, 2008; Song et al., 2022; Yoon, 2018), there are two arguments in the framework above which are described below. First. Research lecturers tend to use (or not use) the Research and Community Service Management System if the research lecturer believes that the Research and Community Service Management System will help the research lecturer to complete his research work better (or worse). This is what is meant by PU. Second. If the research lecturer is

convinced of the usefulness (PU) of the Research and Community Service Management System, at the same time the research lecturer's beliefs arise regarding whether the Research and Community Service Management System is too difficult to use or not. If the research lecturer feels that the Research and Community Service Management System is too difficult to use, then the benefits of the Research and Community Service Management System that the research lecturer feels are disproportionate to the effort of the research lecturer to study the Research and Community Service Management System so that it is easy to use. This is what is meant by PEU. Thus, the higher the PU of the research lecturers uses the Research and Community Service Management System, the higher the BI of the research lecturers, and vice versa. The higher the PEU felt by the research lecturer using the Research and Community Service Management System, the higher the BI of the research lecturer, and vice versa.

This study uses a quantitative approach with the independent variables being PU and PEU and the dependent variable being BI. This research was conducted in one Private Higher Education in Java, Indonesia as a place of research. The time of research is from May to June 2016.

Based on the framework above, the research hypothesis is as follows.

H<sub>1</sub>: Perceived usefulness (PU) has a significant effect on behavioral intention (BI) in Research Lecturers who use Research and Community Service Management Systems in one of the Private Higher Education in Java, Indonesia

H<sub>2</sub>: Perceived ease of use (PEU) has a significant effect on behavioral intention (BI) in Research Lecturers who use Research and Community Service Management Systems in one of the Private Higher Education in Java, Indonesia.

### **Methods and Sampling**

The population of this study were all research lecturers Private Universities in Java, Indonesia which are involved in the use of the Research and Community Service Management System starting in 2012-2016, totaling 83 research lecturers. The sampling method uses a simple random method (Clark & Creswell, 2014). The sample size was determined based on (Krejcie & Morgan, 1970) approach, it was found that N = 80. Based on this information, the sample size for this study was 66 research lecturers.

### **Research Instruments**

This study used a research instrument, namely the Likert-five point scale questionnaire. The questionnaire was used to measure variables (latent variables) which included the benefits of the Research and Community Service Management System felt by research lecturers (PU), the ease of use of the Research and Community Service Management System felt by research lecturers (PEU), and the intention of research lecturers to use the System. Management of Research and Community Service (BI). In the Likert-five point scale questionnaire, each respondent responds to each statement in the range from strongly agree to strongly disagree. Each response strongly agreed, agreed, neutral, disagreed, and strongly disagreed respectively was given a score of 5, 4, 3, 2, and 1. The questionnaire was distributed by visiting the research lecturer directly. The questionnaire is equipped with an endorsement letter. The questionnaire to measure PU, PEU and BI is the result of adaptation. Adaptation result questionnaires require information about reliability, in this case Alpha Cronbach (Vogel et al., 2014).

### **Definition and Measurement of Variables**

There are three variables in this study, namely PU, PEU and BI. PU is measured using 4 (four) items developed and validated by (Davis, 1989). The fourteen PU items have been re-validated by Agarwal & Karahanna, 2000; Murwani, 2008; Teo, 2010. PEU is measured using 4 (four) items developed and validated by (Davis, 1989). The fourteen PEU items have been re-validated by Agarwal & Karahanna,

2000; Murwani, 2008; Teo, 2010. BI is measured using 3 (three) items developed and validated by Agarwal & Karahanna, 2000; Murwani, 2008. Questionnaire items were developed based on the indicators for each variable as presented in Table 1.

**Table 1.** Variables and Indicators

Variable	Indicator	Reference	Instrument
<i>Perceived Usefulness (PU)</i>	PU1	(Agarwal & Karahanna, 2000)	Questionnaire Likert-five point scale
	PU2		
	PU3		
	PU4		
<i>Perceived Ease of Use (PEU)</i>	PEU 1	(Agarwal & Karahanna, 2000)	Questionnaire Likert-five point scale
	PEU 2		
	PEU 3		
	PEU 4		
<i>Behavioral Intention (BI)</i>	BI 1	(Agarwal & Karahanna, 2000)	Questionnaire Likert-five point scale
	BI 2		
	BI 3		

## RESULTS AND DISCUSSIONS

In carrying out research with grants from universities, the research lecturers who received the grant from the 2013 implementation year to the 2016 implementation year used the Research and Community Service Management System. As a research lecturer, the implementation of research using the Research Management System and Community Service starts from submitting research proposals, filling out daily notes, uploading progress reports and final reports, inputting budget usage to reporting research results seminar files.

In this study, data collection was carried out by distributing questionnaires directly, and not online. This is intended so that respondents can immediately ask when filling out the questionnaire, if there are things that need to be asked related to filling out the questionnaire.

For descriptive analysis it was also carried out by dividing the total score obtained in the answers to the questionnaire with the total score (Aditya & Wardhana, 2016), namely calculating the overall response of respondents to the variable Perceived Usefulness (PU) was 963, while the expected overall response was  $5$  (the highest score)  $\times 4$  (number of statements)  $\times 66$  (number of respondents) = 1,320 yields a percentage of 72.95%. Then the variable Perceived Usefulness (PU) is in the "high" category. The overall response of the respondents to the Perceived Ease of Use (PEU) variable was 923, while the expected overall response was  $5$  (highest value)  $\times 4$  (number of statements)  $\times 66$  (number of respondents) = 1,320 resulting in a percentage of 69.92%. Then the Perceived Ease of Use (PEU) variable is in the "above average" category. The overall response of respondents to the Behavioral Intention (BI) variable was 698, while the expected overall response was  $5$  (highest value)  $\times 3$  (number of statements)  $\times 66$  (number of respondents) = 990 resulting in a percentage of 70.5%. Then the Behavioral Intention (BI) variable is in the "high" category.

### Description of Research Variables

Based on the results of research that has been conducted on 66 respondents through distributing questionnaires, an average of the answers to each question item in each variable is carried out to see the trend of answers in each variable.

Variable Perceived Usefulness (PU) Respondents' responses in this study to the variable Perceived Usefulness (PU) can be seen that the highest perception of respondents' responses regarding Perceived Usefulness (PU) lies in the statement "In my opinion, the Research Management System and Community Service is useful for conducting research my University grant " is indicated by the average value in the statement of 4.15 . Meanwhile, the lowest perception of respondents' responses regarding Perceived Usefulness (PU) lies in the statement "With the Research and Community Service Management System, I am more productive in Higher Education grant research activities " indicated by the average value in the statement of 3.17. Furthermore, by looking at the standard deviation value, the statement that has the smallest standard deviation value compared to other statements is "In my opinion, the Research and Community Service Management System is useful for carrying out my Higher Education grant research.", so that the respondents' answers to the statement can be known . it is more homogeneous than the other statements and is also the highest perception of respondents' responses regarding Perceived Usefulness (PU).

Perceived Ease of Use (PEU) Variable Respondents' responses in this study to the Perceived Ease of Use (PEU) variable can be seen that the highest perception of respondents' responses regarding PEU lies in the statement "I easily become skilled in using Research Management Systems and Community Service" indicated by the average value of the statement of 3.61. Meanwhile, the lowest perception of respondents' responses regarding PEU lies in the statement "In my opinion, the Research and Community Service Management System is easy to use (user friendly)" indicated by the average value in that statement of 3.17. Furthermore, by looking at the standard deviation value, the statement that has the smallest standard deviation value compared to other statements is "I easily become skilled in using the Research and Community Service Management System", so that it can be seen that the respondents' answers to these statements are more homogeneous compared to statements others and is also the highest perception of the respondent's response regarding PEU.

Behavioral Intention (BI) Variable Respondents' responses in this study to the Behavioral Intention (BI) variable can be seen that the highest respondent's response regarding Behavioral Intention (BI) lies in the statement "I hope to routinely use the Research Management System and Community Service in research on University grants My height in the future" is indicated by the average value of the statement of 3.59. Meanwhile, the lowest respondent's response regarding Behavioral Intention (BI) , which lies in the statement "I plan to routinely use the Research and Community Service Management System in my research on Higher Education grants in the future " is shown by the average value in this statement of 3.48. Furthermore, by looking at the standard deviation value, the statement that has the smallest standard deviation value compared to the other statements is "I plan to routinely use the Research and Community Service Management System in

my Higher Education grant research in the future.", so that the answers can be known. respondents to this statement are more homogeneous compared to other statements and are also the lowest respondent's response regarding Behavioral Intention (BI) .

### **Validity and Reliability Test**

Validity test, (Agarwal & Karahanna, 2000) proved the validity of PU, PEU and BI based on the r calculated values of PU, PEU and BI, all of which were significant at a significance level = 0.05. This is proof that PU, PEU and BI are valid (Agarwal & Karahanna, 2000). From the research results, the validity test was carried out with SPSS and the results of validity testing for each statement item on the research variable found that the validity test on all statement items on PU, PEU and BI variables resulted in a significance value of less than 0.5. So that all statement items that form research variables can be declared valid.

Reliability test, (Agarwal & Karahanna, 2000) proved the reliability of PU, PEU and BI based on Cronbach's Alpha of PU, PEU and BI above 0.6. This is evidence that PU, PEU and BI are reliable (Agarwal & Karahanna, 2000). From the data obtained in this study, after processing the data it was found that the Cronbach's Alpha Coefficient of PU, PEU and BI variables was above 0.6 so that the questionnaire was declared reliable.

### **Classic assumption test**

Normality is known to have a significant Kolmogorov-Smirnov Z value of 0.018 < 0.5 , so that it can be stated that the residuals are not normally distributed at the 5% level. However, because of the significant value of 0.018 > 0.01, it can be stated that the residuals are normally distributed at the 1% level.

Multicollinearity, after processing the data it is known that the Collinearity Statistics of the PU independent variables and the PEU independent variables, the tolerance value for the independent variables is > 0.1 and the variance inflation factor (VIF) if using alpha/tolerance = 10% or 0.10 then VIF = 10. From the calculated VIF output results of the two variables = 1.033 < VIF = 10, it can be concluded that between the independent variables there is no multicollinearity.

Heteroscedasticity, on the t test with sig. of 0.533 and 0.944 > 0.05. Therefore it can be seen that there is homoscedasticity (or no symptoms of heteroscedasticity) in the regression model and confirms the feasibility of the regression model in this study.

Autocorrelation test. In this study, the number of respondents (n) used was 66 people, while the independent variable (k) used in this study was 2. Based on the Durbin-Watson table, if n = 66 and k = 2 then the dU value is 1,664 and the range used is 1.664 - 2.336, and the Durbin-Watson value is 2.040 meaning there is no autocorrelation.

Linearity test, obtained the results of the significance value of linearity is 0.000 < 0.05, so it can be concluded that there is a significant linear relationship between the PU independent variable and the BI dependent variable. And the results of the significance value of linearity are 0.009 < 0.05, so it can be concluded that there is a significant linear relationship between the PEU independent variable and the BI dependent variable.

### **Results of Multiple Linear Regression Analysis**

The analysis in this study uses the independent variables PU and PEU while the dependent variable is BI. To find out whether PU and PEU variables as independent variables are positively or negatively related, multiple regression analysis is used. In addition, multiple regression analysis is also used to predict the value of the BI variable as the dependent variable if the PU variable and PEU variable values as independent variables experience an increase or decrease.

From the results of the data obtained and processing of multiple linear regression data in SPSS, it can be seen that the regression equation used is:

$$\hat{Y} = b_0 + b_1X_1 + b_2X_2$$



$$\widehat{BI} = b_0 + b_1PU + b_2PEU$$

$$\widehat{BI} = -0.205 + 0.485 PU + 0.291 PEU$$

Information :

$$\hat{Y} = \widehat{BI} = \text{Behavioral Intention Predicted}$$

$$X_1 = PU = \text{Perceived Usefulness}$$

$$X_2 = PEU = \text{Perceived Ease of Use}$$

Based on the analysis of the regression coefficient values above, the interpretation of the equation is

- constant value -0.205 is negative by 0.205, meaning BI predictions decrease if PU and PEU are Zero, it will be but No significant . this \_ can seen in the SPSS output results where constant have Sig value . 0.926 > 0.05.
- Coefficient value PU regression is positive by 0.485, that is PU variables have connection in the same direction with Y and every increase One PU unit will influential to increasing BI of 0.401
- Coefficient value PEU regression is positive by 0.291, that is the PEU variable has connection in the same direction with BI and every increase One PEU units will influential to BI increased by 0.291.

F test , from the output of SPSS Multiple Linear Regression above, it is necessary to test F to determine the effect of the independent variables PU and PEU together (simultaneously) on the BI dependent variable. Using a significance level of 5% (0.05), the F value is 13.886 with a sig. 0.000 < 0.05, it can be said that there is a jointly significant influence between the independent variables on the dependent variable. This means that PU and PEU variables simultaneously affect BI. t test is also needed to determine the partial effect of each PU and PEU independent variable on the BI dependent variable. The results of the t test can be seen in Table 5.14. The coefficients above in the sig (significance) column are 0.000 and 0.019 < 0.05. So it can be said that there is influence between the independent variables on the dependent variable partially. This means that the PU variable is partially bound to the BI variable and the PEU variable is partially bound to the BI variable.

The coefficient of determination , to determine the total percentage of variation in the BI dependent variable which is explained by the PU and PEU independent variables, is the Summary Model, namely R Square = 0.306 = 30.6%. So that it can be seen that the BI variable that can be explained by the PU and PEU variables is 30.6%, the remaining 69.4% by other independent variations besides PU and PEU.

## Discussion

Perceived usefulness (PU) research lecturers who use the Research and Community Service Management System in one Private University in Java , Indonesia . Based on the results of the research and descriptive analysis that has been carried out, it is known that the Perceived Usefulness (PU) of the research lecturers uses the Research Management System and Community Service in one of the Private Universities in Java , Indonesia are in the "high" category which has an overall percentage of respondents' responses of 72.95%, meaning that research lecturers who use the Research and Community Service Management System at UC have felt the benefits that have been provided by the Research and Community Service Management System. The statement item that has the highest average value in the Perceived Usefulness (PU) variable is the PU3 item "In my opinion, the Research and Community Service Management System is useful for carrying out my Higher Education grant research." with an average score of 4.15, and which has the lowest average score, namely the PU2 item "With the Research and Community Service Management System, I am more productive in Higher Education grant research activities." With an average score of 3.17.

Perceived ease of use (PEU) research lecturer who uses a Research and Community Service Management System at a private university in Java, Indonesia. Based on the results of the research

and descriptive analysis that has been carried out, it is known that the Perceived ease of use (PEU) of research lecturers who use the Research and Community Service Management System at a private university in Java, Indonesia is in the "above average" category. has an overall percentage of respondents' responses of 69.92%, meaning that research lecturers who use the Research and Community Service Management System at a private university in Java, Indonesia find it quite easy to use the Research and Community Service Management System. The statement item that has the highest average value in the Perceived ease of use (PEU) variable is the PEU3 item "I easily become skilled in using the Research and Community Service Management System." with an average score of 3.61, and the one with the lowest average score is the PEU4 item "In my opinion, the Research and Community Service Management System is easy to use ( user friendly )." With an average score of 3.33.

Behavioral intention (BI) research lecturer using a Research and Community Service Management System at a private university in Java, Indonesia. Based on the results of the research and descriptive analysis that has been carried out, it is known that the Behavioral Intention (BI) of research lecturers who use the Research and Community Service Management System at a private university in Java, Indonesia is in the "high" category which has a percentage of respondents' responses as a whole as much as 70.5%, meaning that research lecturers who use the Research and Community Service Management System at a private university in Java, Indonesia feel an interest in routinely using the Research and Community Service Management System in higher education grant research in the future . The statement item that has the highest average value in the Behavioral Intention (BI) variable is item BI3 "I hope to routinely use the Research and Community Service Management System in my future higher education grant research." with an average score of 3.59, and the one with the lowest average score is item BI1 "I find it easy to learn to use the Research and Community Service Management System." With an average score of 3.48.

Effect of perceived usefulness (PU) on behavioral intention (BI) to a research lecturer who uses a Research and Community Service Management System at a private university in Java, Indonesia. Based on the results of the research and multiple regression analysis, especially the t test that has been carried out, it is known that perceived usefulness (PU) has a significant effect on behavioral intention (BI) in research lecturers who use the Research and Community Service Management System at a private university in Java, Indonesia. The results of this study are in line with the research of (Aditya & Wardhana, 2016; Davis, 1989; Murwani, 2008; Teo, 2010) stated that Perceived Usefulness (PU) has a significant effect on Behavioral Intention (BI).

The effect of perceived ease of use (PEU) on behavioral intention (BI) in research lecturers who use the Research and Community Service Management System at a private university in Java, Indonesia. Based on the results of the research and multiple regression analysis, especially the t-test that has been carried out, it is known that Perceived Ease of Use (PEU) has a significant effect on behavioral intention (BI) in research lecturers who use the Research and Community Service Management System at a private university in Java, Indonesia. The results of this study are in line with the research of (Aditya & Wardhana, 2016; Davis, 1989, 1993; Murwani, 2008; Teo, 2010) stated that Perceived Ease of Use (PEU) has a significant effect on Behavioral Intention (BI).

## CONCLUSION

From the results of the research that has been carried out, the conclusions obtained are as follows. Perceived Usefulness (PU) lecturer researcher user System Management Research and Community Service in one Private Higher Education in Java , Indonesia already including tall and be important. Perceived Ease of Use (PEU) lecturer researcher user System Management Research and Community Service in one Private Higher Education in Java , Indonesia already including tall and be important. Behavioral Intention ( BI) lecturer researcher user System Management Research and Community Service in one Private Higher Education in Java , Indonesia already including tall and be important. Perceived Usefulness (PU) in a way Partial influencing Behavioral Intention (BI) on lecturers

researcher user System Management Research and Community Service in one Private Higher Education in Java , Indonesia. Perceived Ease of Use of Use (PEU). Partial influencing Behavioral Intention (BI) on lecturers researcher user System Management Research and Community Service in one Private Higher Education in Java , Indonesia. Kindly whole can concluded that PU, PEU and BI are all the same importance ( height ) in use System Management Research and Community Service in one Private Higher Education in Java, Indonesia. And also the influence of Perceived Usefulness (PU) and Perceived Ease of Use (PEU). partially and together influencing Behavioral Intention (BI) on lecturers researcher user System Management Research and Community Service in one Private Higher Education in Java, Indonesia. The magnitude the effect of PU, PEU on BI is 30.6%, meanwhile the remaining 69.4% is explained by by variable free other besides variable Perceived Usefulness (PU) and variable Perceived Ease of Use (PEU) which is not researched in study this. The research has some limitations that should be acknowledged. Firstly, the study was conducted at a single private university in Java, Indonesia, which may limit the generalizability of the findings to other institutions or regions. Future research could expand the scope to include multiple universities to enhance the external validity of the results. Secondly, the data were collected using self-reported surveys, which may be subject to response biases or social desirability effects. Future studies could incorporate objective measures or qualitative methods to complement the findings. Additionally, the research focused on research lecturers; including other stakeholders like students or administrative staff could provide a more comprehensive understanding of technology acceptance in the academic setting. The research holds several implications and contributions to the field. Firstly, it provides insights into the perceived usefulness and ease of use of the Research and Community Service Management System in the context of higher education. The findings indicate that research lecturers perceive the system as highly useful and relatively easy to use, which could encourage further adoption and integration of technology in research and community service activities. Secondly, the study demonstrates the significant impact of perceived usefulness and perceived ease of use on behavioral intention, emphasizing the importance of user experience in driving technology acceptance. This knowledge can guide educational institutions in designing user-friendly systems and providing adequate training and support to promote technology adoption. Furthermore, the research contributes to the existing literature by applying the Technology Acceptance Model (TAM) in the specific context of research management systems in higher education. It adds to the body of knowledge surrounding technology acceptance theories and their applicability in academic settings. The study's quantitative approach, descriptive analysis, and multiple regression analysis serve as a reference for other researchers exploring similar topics or utilizing TAM in different domains. Overall, the research sheds light on the factors influencing technology adoption among research lecturers, which has implications for enhancing research productivity and efficiency in the higher education sector.

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