Conference Paper

What's Wrong with SISDALSKRIPSI? An Evaluation of the Thesis Control System at UNNES

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Abstract

This study aims to examine the implementation of thesis control system (SISDALSKRIPSI) at the Faculty of Economics, Universitas Negeri Semarang (FE UNNES). The concept of Unified Theory of Acceptance and Use of Technology (UTAUT) is used to understand the factors that influence the students want to use SISDALSKRIPSI in FE UNNES. The research design is evaluative research. The population of the research is the students of the Department of Economic Education, FE UNNES who are preparing the thesis. Respondents in this study are also lecturers and supervisors at FE UNNES. The questionnaires and interviews were used to collect the data. Data analysis techniques used are multiple regression analysis and focus group discussion. The results showed that effort expectancy, performance expectancy, and social influence have positive and significant impact on intention to use SISDALSKRIPSI. Intension and facilitating condition also proved to have positive and significant effect on the actual use of SISDALSKRIPSI. Other results indicate that SISDALSKRIPSI still have to be improved. So it will be easier to use by lecturers and students.

Keywords: on time graduation; SISDALSKRIPSI; thesis control system; UTAUT

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1. Introduction

Universities are expected to produce graduates with competitiveness. Therefore, graduates must have adequate competence. In addition, universities should also pay attention to the speed level students in completing their studies. On time graduation is one of the problems that still occur in college. UNNES also experienced the problem. The data shows no more than 50% of UNNES students are able to complete their studies on time, in the eighth semester. Ironically, there are more than 10% of students who graduate in the last semester (semester fourteen).

Increased on time graduation is a major concern of UNNES management by taking strategic policy. Involvement of parents, academic supervisors, thesis supervisors, and

other parties is a pragmatic step that has been taken. The hope of students can identify the constraints faced and ultimately able to complete the thesis. Faculty of Economics UNNES take a more systematic step by preparing standard operating procedure (SOP) completion of thesis and implements thesis control system (SISDALSKRIPSI) based on information system.

The academic data of FE UNNES shows over the last 2 years, there are about 10% of students are still trying to complete their thesis in semester 14. The fact that less encouraging. Some steps have been taken such as inviting students and parents in the 11th and 13th semesters. However, the problem of "old students" is still going on.

Pramusinto, Murniawaty, & Bowo (2017) show the actuality of the on time graduation program's achievement has not fully contributed to the timely graduation and completion of the student thesis. The programs in question include the signing of a letter of ability to solve the thesis on time. Some of the factors that cause students to be unable to complete the study on time are; (1) policy changes supervisor who turns on the way, (2) administrative services thesis is still lacking, and (3) internal factors such as the student intentionally delays for various reasons.

FE UNNES implements SISDALSKRIPSI as a strategic effort to improve on time graduation. SISDALSKRIPSI is a thesis completion control system based information systems are intended to provide information to students and thesis supervisor about achieving the stage of completion of a thesis by a student. SISDALSKRIPSI complete the thesis information system (SITED) which has been applied in UNNES. The weakness of SITEDI is not able to provide fast and detailed information about thesis writing stage that has been completed by the students. SITEDI only records the chronology of guidance done by lecturers. SISDALSKRIPSI will be able to overcome these weaknesses. SISDALSKRIPSI is implemented in January 2018.

For two months of implementation, SISDALSKRIPSI is still not maximized. Students and lecturers have not used well as the use of SITEDI. It is seen that there are still many lecturers and students who do not report the results of guidance on SISDALSKRIPSI. Some of the reasons for the low use of SISDALSKRIPSI include; the system is still considered new and still in the socialization stage. Support from thesis supervisor is still low even though the policy has been taken by the management.

The Unified Theory of Acceptance and Use of Technology (UTAUT) can be used to understand the behavior of SISDALSKRIPSI use. The concept of UTAUT is developed from the concept of Technology Acceptance Model (TAM). The Unified Theory of Acceptance and Use of Technology (UTAUT) can be used to understand the behavior

of SISDALSKRIPSI use. The concept of UTAUT is developed from the concept of Technology Acceptance Model (TAM). The concept of TAM has been used by researchers to understand the factors that influence the intention of student to use mobile learning [7], or faculty acceptance of e-books [1]. Some researchers use the concept of UTAUT in understanding the use of technology within the framework of education. The UTAUT concept is the best model for understanding acceptance and use of technology over TAM and TPB (Theory of Planned Behavior) [4]. Many researchers use the concept of UTAUT with various models and analysis tools [16].

Chang (2013) found the impact of UTAUT dimensions on users' behavioral intention of using library mobile applications. Yuvaraj (2016) also proved the concept of UTAUT to investigate behavioral intention of recruiters to adopt social media. He also found that gender and age are moderator variable. The same results were obtained by other researchers. [2, 5] who found the effect of the UTAUT dimension.

Tarhini, Masa'deh, Al-Busaidi, Mohammed, & Maqableh (2017) only found positive effect of performance expectancy, effort expectancy, and social influence on behavioral intention to use e-learning. Facilitating conditioan has no impact on behavioral intention. Muhsin, Thomas, & Nurkhin (2016) show that intention to use e-journal was only determined by performance expectancy and social influence. While effort expectancy has no positive and significant influence. The other result show intention to use e-journal and facilitating conditions have positive and significant effect on actual use of e-journal. Maldonado, Khan, Moon, & Rho (2011) add e-learning motivation in the UTAUT model to investigate the use of e-learning. He show that e-learning motivation and social influence positively influence on behavioral intention. While facilitating condition is not proven to affect e-learning portal use.

Singeh, Abrizah, & Karim (2013) failed to prove the concept of UTAUT in testing authors' behavioral intention to self-archive. Wong, Russo, & McDowall (2012) only found positive and significant effect of performance expectancy and effort expectancy on intention to use interactive whiteboard. The other dimensions, social influence and facilitating condition have no impact. Khan, Masrek, Mahmood, & Qutab (2017) found that perceived of usefulness and ease of use positive and significantly inluence on intention to adopt digital reference services. Lwoga & Questier (2014) found that performance expectancy, effort expectancy, and social influence have positive effect on intentions of web-based learning. Isaias, Reis, Coutinho, & Lencastre (2017) failed to test the effect of UTAUT dimensions on students' behavioral intention to use emphatic forums.

The purpose of this study is to describe the implementation of SISDALSKRIPSI in FE UNNES and to investigate the factors that influence the use of SISDALSKRIPSI by the students of Department of Economic Education FE UNNES. This research uses UTAUT concept which is still various research result. So, the theme of this research is still interesting to do.

2. Theoritical Background

2.1. The concept of unified theory of acceptance and use of technology (UTAUT)

The concept of UTAUT is developed from the concept of Technology Acceptance Model (TAM). The UTAUT suggests that four core constructs (performance expectancy, effort expectancy, social influence and facilitating conditions) are direct determinants of behavioral intention and ultimately behaviour, and that these constructs are in turn moderated by gender, age, experience, and voluntariness of use [15]. Both models are used to understand behavior in using a technology or information system. Someone will use it if the information system is considered useful and easy to use. The UTAUT concept adds two other dimensions, namely social influence and facilitating condition. In addition UTAUT also relates it to other variables such as gender, age, experience, and voluntart as a moderating variable.

2.2. Hypothesis

Many researchers try to use other concepts such as TAM, TPB, TRA, MM, and others to investigate factors that affect the acceptance behavior and use of technology [4, 16]. The UTAUT concept is well suited for understanding the behavior of students in receiving and willingness to use SISDALSKRIPSI. Performance expectancy, effort expectancy, and social inluence are the determinants of behavioral intention. Someone will use technology (information systems) if he considers it as something useful, easy to use, and also driven by others (social factors).

Behavioral intention will affect the actual use. In addition, facilitating conditions will improve the use behavior of information systems. Availability of internet network (especially wi-fi) will facilitate students in using SISDALSKRIPSI. Moreover, the campus provides adequate computer to access the system, then students will increasingly often utilize SISDALSKRIPSI.

Many researchers have successfully proven the effect of the UTAUT dimension [2–4, 18]. Other researchers did not succeed [6, 13]. And some researchers only find the effect of some dimensions of UTAUT [8, 10, 11, 17].

Based on explanation before, the hypotheses in this research are as follows;

H1: performance expectancy has positive and signigicant effect on behavioral intention.

H2: effort expectancy has positive and signigicant effect on behavioral intention.

H3: social influence has positive and signigicant effect on behavioral intention.

H4: facilitating conditions has positive and signigicant effect on use behavior.

H5: behavioural intention has positive and signigicant effect on use behavior.

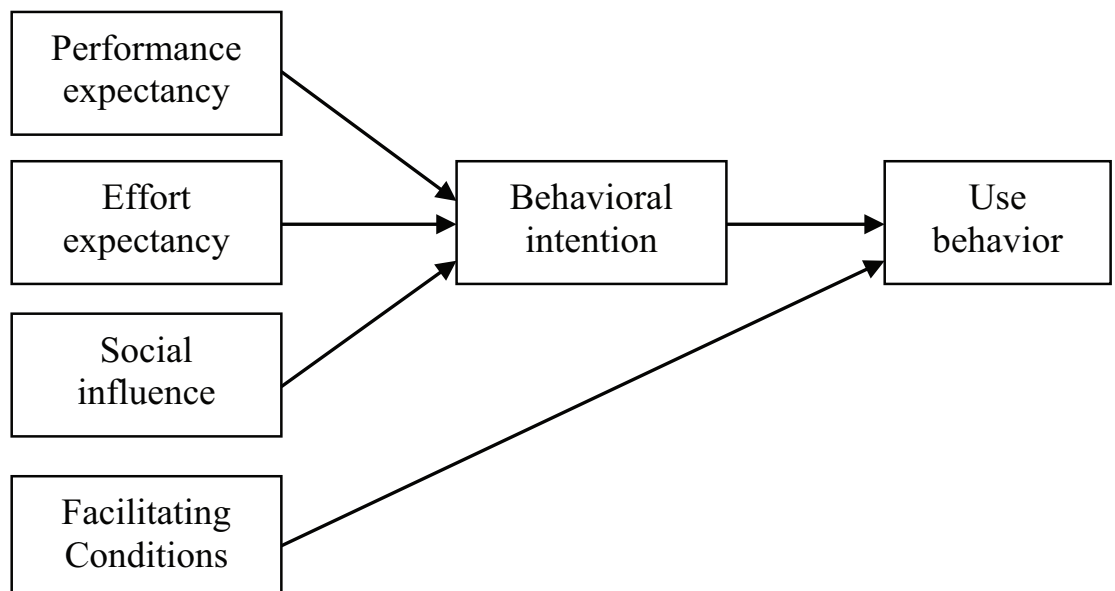The framework of thinking of this research can be seen in Figure 1 below.

Figure 1: Theoretical Background.

3. Method

This research is quantitative research. Using causality testing, this research aims to investigate the effect of performance expectancy, effort expectancy, social influence on vehavioural intention to use SISDALSKRIPSI. And to test the effect of behavioral intention and facilitating conditions on use behavior of SISDALSKRIPSI.

The population in this research are students of Economic Education Department, FE UNNES. We used purposive sampling to determine the sample. The criteria is students who write their final project (thesis) at 2018.

The variable of this research are developed from the concept of UTAUT. There are performance expectancy, effort expectancy, social influence, facilitating conditions, behavioral intention to use SISDALSKRIPSI, and actual use SISDALSKRIPSI.

We use questionnaire to collect the data. The questionnaire is developed from the indicators of each variable in UTAUT concept. The respondents are asked to choose one alternative answer which has been provided. Each question item is given five answers using a score scale. Each question item is provided with 1 – 5 scale range with extremes S D (strongly disagree) and S A (strongly agree).

We used descriptive analysis and multiple regression analysis. The descriptive analysis is used to describe the variabel of research. The multiple regression analysis is used to investigate the effect of independent variables (effort expectancy, performance expectancy, social influence, facilitating condition) on dependent variables (intention to use and actual use).

The multiple regression equation developed in this research as follows.

$$\text{Intention} = b_1\text{effort} + b_2\text{performance} + b_3\text{social} \qquad (1)$$

$$\text{Use behavior} = b_1\text{intention} + b_2\text{facilitating} \qquad (2)$$

4. Result and Discussion

We collect data using quesionare. There are 104 respondents. Table 1 show the statistical descriptive of research variables. Table 1 show that the student of Economic Department, FE UNNES still rarely use SISDALSKRIPSI. The average value of the use behavior included in the low category. Students give an opinion that SISDALSKRIPSI useful for him and easy to use. Students' intention to use sisdalskripsi included in the category is quite high.

Table 2 shows the results of hypothesis testing of the first equation, namely the influence of performance expectancy, effort expectancy, and social influence on behavioral intention. The performance expectancy has a t value of 2.450 and the sig value. of 0.016 lower than 0.05. That is, performance expectancy proved to have a positive and significant impact on behavioral intention. The effort expectancy has a t value of 1.804 and the sig value. of 0.074. The effort expectancy variable proved to have positive and significant effect on behavioral intention at 10% error rate. The next

TABLE 1: Statistic descriptive of research variables.

	N	Min	Max	Mean	Std. Dev.
performance expectancy	104	11	27	17,81	3,531
effort expectancy	104	9	26	17,38	3,837
Social influence	104	8	26	16,64	3,455
Facilitating Conditions	104	10	26	16,53	3,497
Behavioral intention	104	5	20	11,81	3,040
Use behavior	104	2	13	6,05	2,346

result is the social influence variable of t value of 1.049 and the sig value. 0.297 which is greater than 0.05. It means that the social influence has no positive and significant effect on behavioral intention.

TABLE 2: Result of first regression equation testing.

	Constant	performance expectancy	effort expectancy	Social influence
Standardized coefficent	3,525	0,226	0,154	0,095
t-value	2,147	2,450	1,804	1,049
Sig.	0,034	0,016	0,074	0,297
F-value				9,073
Sig.				0,000
Adjusted R Square				0,190

Table 2 also shows that the value of Adjusted R Square is 0.190. This means that the three independent variables are only able to explain the relationship with behavioral intention variable of 19%. The rest is influenced by other variables that are not examined. This contribution is very low.

The results of testing the second regression equation shown in table 3. The results show that facilitating conditions have a sig value. of 0.089 greater than 0.05 but significant at a 10% error rate. That is, facilitating conditions proved to positively and significantly affect the use behavior. Behavioral intention has a sig value. of 0.001 lower than the error rate of 0.05. This means that behavioral intention proved to have a positive and significant impact on use behavior. Adjusted R Square value of 0.247. This means that the independent variables are able to explain the effect on the use behavior of 24.7%. Considerable contribution.

5. The Use Of SISDALSKRIPSI

The use of SISDALSKRIPSI by PE UNNES students in low category. This phenomenon is quite interesting to be observed. Socialization has been done was not able to influence

TABLE 3: Result of second regression equation testing.

	Constant	Behavioral Intention	Facilitating conditions
Standardized coeffecient	0,578	0,128	0,284
t-value	0,581	1,717	3,325
Sig.	0,563	0,089	0,001
F-value			17,897
Sig.			0,000
Adjusted R Square			0,247

the behavior of students to want to use the information system. The average student believes that SISDALSKRIPSI is quite useful and easy to use. FE leaders should encourage the use of SISDALSKRIPSI by monitoring and evaluation. Lecturers and students are expected to immediately use SISDALSKRIPSI well. Another effort that can be taken is to provide rewards to students and lecturers who actively use SISDALSKRIPSI.

6. Understanding the Use of SISDALSKRIPSI from UTAUT Model

The low usage level of SISDALSKRIPSI by students can be understood by using UTAUT concept. The results showed that performance expectancy has been shown to have a positive and significant effect on behavioral intention. That is, students realize and understand that SISDALSKRIPSI very useful and will be able to improve administration of completion of thesis. So that students have a high intention and will continue to use the system. This is consistent with results of previous studies [2–5, 9, 11, 17, 18]. The findings in the study are not in line with the results of previous researchers who failed to find a positive effect of performance expectancy on behavioral intention. [6, 13].

The results also show that effort expectancy has a positive and significant effect on behavioral intention, although it is significant at 10% error rate. Ease of using SISDAL-SKRIPSI will affect student intentions. Students will be more reluctant and will not want to use the information system if the system is considered difficult to use. The results of this study confirm the results of previous studies [2–5, 8, 17, 18]. Nevertheless, there are some researchers who found no effect of effort expectancy on behavioral intention [11, 13, 14].

Only social influence is not proven to have a positive and significant effect on behavioral intention. Students are not influenced by colleagues and lecturers to want to use SISDALSKRIPSI. Usability and convenience are the main factors that influence it. The

results of this study are not in accordance with the results of previous studies that managed to find a positive and significant influence of social influence on behavioral intention [2, 3, 5, 9–11, 14, 18]. However, the results of this study are in line with the results found by Isaias et al. (2017) and Wong et al. (2012).

Other results indicate that facilitating conditions can influence the use behavior. It means that the better and complete support facilities (such as the availability of Wi-Fi for smooth internet access) will affect the behavior of students to want to use SISDALSKRIPSI. Students will be reluctant to use SISDALSKRIPSI if they do not have adequate facilities. The findings of this study are in line with previous studies [2, 3, 5, 11]. However, there are researchers who do not find any influence on facilitating conditions for use behavior [10, 14].

The use behavioral of SISDALSKRIPSI has been shown to be influenced by behavioral intention. Student intentions are an important factor in influencing the use of SISDAL-SKRIPSI. The results of this study confirm the concept of UTAUT, namely that student's intention will have a positive and significant effect on actual use. The sig value of the effect of behavioral intention on the use behavior is 0.001. That is, the effect of behavioral intention is very strong. Therefore, student intentions should be enhanced with various efforts to be willing to use SISDALSKRIPSI in the future. The results of this study are in accordance with the results of previous studies.

7. Conclusion

This research has not been able to fully confirm the concept of UTAUT to understand the behavior of SISDALSKRIPSI students of FE UNNES Economic Education Department. Only performance expectancy variable proved to have a positive and significant effect on behavioral intention in 5% error rate. While the variable effort expectancy has a positive and significant influence on the level of significance of 10%. In fact, social influence variable is not proven to have a positive and significant effect on behavioral intention. That is, the intention of students using SISDALSKRIPSI not because of encouragement from friends and from supervisors. The most dominant factor is the opinion that SISDALSKRIPSI is a useful system and will assist students in completing the thesis administratively.

The next results of this study is quite interesting. Facilitating conditions proved able to influence student use behavior in using SISDALSKRIPSI although at the level of 10% significance. The most powerful factor affecting use behavior is behavioral intention. It

means that strong intentions will be able to encourage students to use SISDALSKRIPSI continuously.

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