The Impact of the Facility Condition and Social Influence on Intention to Use E-Learning

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Abstract. E-learning is an online learning process that can be accessed anywhere. Apart from ensuring adequate facility conditions, social interaction is also needed to generate the intention to carry out the e-learning process. The purpose of this study is to determine whether there is an influence of facility conditions and social influence on the intention to use e-learning. The research was conducted at Semarang State University in February 2020 to determine the acceptance and usefulness aspects of e-learning. In this study, facility conditions and social influences are determinants and supporters of the intention to use e-learning. Facility conditions and social influence are determining factors in supporting the intention to use e-learning. The data collection technique is in the form of a questionnaire. The data analysis technique uses SEM with the WarpPLS approach, which will test the causality path both on the outer and inner models with an experimental design. This medium is expected to explore the findings of new, more comprehensive, and suitable causal pathways that can be used to interpret data appropriately. The results showed that the facilities' condition was very good, and the support of social influences could increase the intention to use e-learning as an environmentally friendly learning technology.

Keywords: Facilitating Conditions, Social Influence, Behavioral Intention, E-learning.

1 Introduction

The advancement of information technology in education is very fast and demands that all participate in applying technology. Higher education must be aware of technology and information quickly, accurately, relevant, and accurately in academic activities [1]. Academic quality can be seen from the strategy to achieve competitive advantage and high competitiveness between universities [2]. Technological developments in higher education can support the learning process, one of which is using e-learning. According to Ariani [3], e-learning is interactive, attracts attention, and involves students in the learning process. E-learning is a learning method using the internet [4]. The e-learning process is carried out formally according to the learning curriculum, semester learning plans, teaching materials, and learning evaluations that have been compiled and defined.

E-learning is an information technology-based learning technology that can be accepted in the world of education. This acceptance is in the context of improving quality human resources with this information technology's ability to overcome labor problems and economic conditions [5]. E-learning is part of information technology, which is the main requirement for competence in the social and the world of work [6]. According to Horton [7], e-learning is a

web technology using the internet for the learning process. E-learning is an innovation in sending interactive material with various attributes and digital technology resources in an open, flexible, and distribution learning process [8]. According to Gilbert and Jones [9], E-learning delivers learning materials with electronic media using the internet, broadcast satellites, audio/videotapes, interactive television, CD-ROM, and computer-based training. Furthermore, e-learning is learning using electronic circuits in the form of local area networks, wide area networks, or the internet as the delivery of learning content and interaction or guidance [10].

The e-learning process includes the following components: 1) Relevant content, 2) Learning methods as needed, 3) Media elements as content distribution and learning methods, 4) Guided learning or independent learning, 5) Growing knowledge and techniques new learning objectives [11]. The main components in e-learning include: 1) students, 2) faculty/instructors, 3) facilitators, 4) support staff 5) administrators [12]. Components in e-learning that institutions must now consist of 1) learning design, 2) multimedia components, 3) internet equipment, 4) computers and storage of tools, 5) connection and service providers, 6) power/management programs, software, 7) services and applications connection [8]. The electronic learning process in the classroom includes: 1) Supplement is an available and selectable electronic learning material 2) Complement is an electronic learning material that is programmed as a complement to learning material that can be accepted in class 3) Substitution is an alternative learning model [13].

Universitas Negeri Semarang has used a learning system using e-learning. In the learning process, using e-learning is expected to support more effective and efficient learning management. E-learning provides convenience in the learning process and does not need to be face to face. Even though e-learning has been applied to theoretical, practical, and assignment courses, e-learning is still difficult to use in the learning process. There are many obstacles, such as lack of information about e-learning, less flexible e-learning support facilities, and other barriers related to social influence and the condition of existing facilities. Social impact is the use of technology-based on encouragement or support from outside other individuals [14], [15]. Before making a decision, a person sometimes considers the expectations that will be achieved. Beliefs provide encouragement or support in forming intentions. The social influence will affect intent [15][16].

Meanwhile, the facility's condition is a person's perception of infrastructure, resources, and techniques in operating technology [15][17]. The intention is something that is expected by a certain behavior [18]. According to Fishbein [19], the purpose is an effort made to achieve a goal. The intention is the desire to carry out a behavior, while the behavior is real action on that desire [20]. The stronger the insults or expectations, the stronger the intention to display a behavior [21]. The use of e-learning aims to socialize better learning system improvements.

2 Research Methods

This research was conducted at the Faculty of Economics, State University of Semarang. The data used are primary data obtained from questionnaires to respondents consisting of students and documentation [22]. Sampling using a proportionate stratified random sampling method because the population is not homogeneous. According to Sugiyono [23], proportionate stratified random sampling is used if the community has members who are not

homogeneous and have proportionate strata. The sample used was 280 respondents. According to Ferdinand [24], sampling is based on Krijcie and Morgan tables with 1000-1100 respondents. Reliability testing can use the indicator value by squaring each indicator. An indicator is said to be reliable if the hand is greater than 0.7 [25]. The validity test can be seen from the average variance extracted (AVE) value of the latent variable. It is valid if the latent variable has an average variance extracted (AVE) value greater than 0.5 [26].

There are independent variables in this study, namely social influence and facility conditions, while the dependent variable is intention. The data analysis technique in this study, used the Structural Equation Model (SEM). SEM is a technique that combines multiple regression and factor analysis to estimate the dependency relationship simultaneously [27]. SEM is widely used to calculate variance, covariance analysis, multiple regression, factor analysis, path analysis, simultaneous equations and nonrecursive modeling, latent, and multilevel curve modeling [28]. SEM can identify constructs and influence measures that have identified dimensions [29].
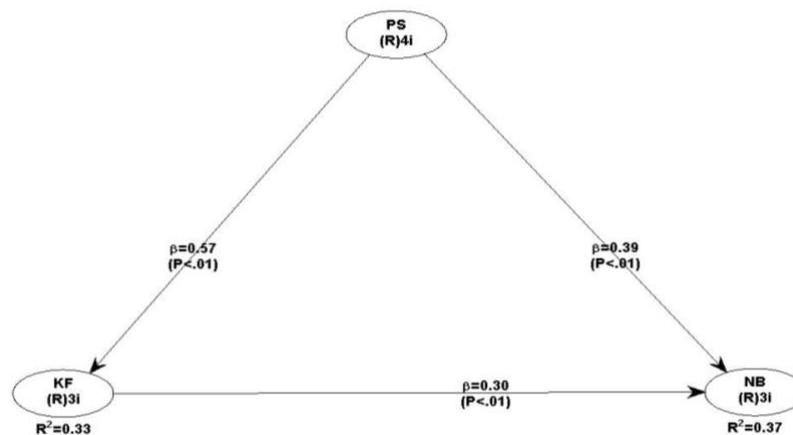
3   Result and Discussion

Fig. 1. Research Model in WarpPLS

Testing the reliability using SEM WarpPLS it is necessary to check indicators as a measurement tool for latent variables. Reliability can be accepted if the indicator is more than 0.7 [25]. Each indicator can be calculated by running the PLS algorithm using WarpPLS 6.

Table 1. Reliability

Latent Variable	Indicator	Value Reliability Indicator	Note
Social Influence	PS 1	0.800	Reliability
	PS 2	0.862	Reliability
	PS 3	0.712	Reliability
	PS 4	0.710	Reliability
Condition Facilities	KF 1	0.853	Reliability

	KF 2	0.720	Reliability
	KF 3	0.820	Reliability
	NB 1	0.744	Reliability
Intentions Using	NB 2	0.710	Reliability
	NB 3	0.707	Reliability

Source: Researchers Processed Data, 2020.

Based on table 1., the social influence variable has four indicators: getting the predicate reliable on all hands. There are three indicators in the facility condition variable with a reliable predicate for each indicator. The intention to use e-learning has three arrows, and all of them get reliable predicates. It is said to be valid if the average variance extracted (AVE) value in the variable is greater than 0.5 [26].

Table 2. Average Variance Extracted (AVE)

Latent Variable	Average Variance Extracted (AVE)	Note
Social Influence	0.554	Valid
Condition Facilities	0.593	Valid
Intentions Using	0.508	Valid

Source: Researchers Processed Data, 2020.

Based on Table 2, the social influence variable is valid, with a value of 0.554. The Average Variance Extracted (AVE) value of 0.593 is said to be useful for the variable facility conditions, and the intention to use e-learning gets an Average Variance Extracted (AVE) value of 0.508 with a valid predicate. The following is a table 3 of the results of the research hypothesis:

Table 3. Path Coefficients

Variable	Social influence	Facility conditions	Intention
Social Influence			
Facility Conditions	0.575		
Intention	0.385	0.299	

Source: Researchers Processed Data, 2020.

Based on table 3., it shows that the influence of the variable on the condition of the facility is 0.575, the coefficient of the impact of the social influence variable on the intention to use e-learning is 0.385, and the influence coefficient of the effect on the choice to use e-learning is 0.299.

Table 4. P-Values

Variable	Social influence	Facility conditions	Intention
Social Influence			
Facility Conditions	<0.001		
Intention	<0.001	<0.001	

Source: Researchers Processed Data, 2020.

Based on table 4, the p-value shows the influence of the social influence variable on the condition of the facility of <0.001, the p-value shows the impact of the social influence

variable on the intention to use e-learning of <0.001, and the p-value is the effect of the facility condition on purpose using e-learning for <0.001.

Table 5. Hypothesis

Relationship Between Variables		Coefficients	P-Value	Note
Social Influence	Facility Conditions	0.575	<0.001	Highly Significant
Social Influence	Intention	0.385	<0.001	Highly Significant
Facility Conditions	Intention	0.299	<0.001	Highly Significant

Source: Researchers Processed Data, 2020.

Based on table 5, the results of the research hypothesis that there is a variable influence of social influence on the condition of the facility with a value of p <0.001, so it gets a very significant predicate with a coefficient of 0.575. This shows that the greater the social influence, the better the condition of the facilities. The variable of the impact of the colonial effect on the intention to use e-learning with a p-value of <0.001, then it gets a very significant predicate with a coefficient of 0.385. This shows that the greater the social influence of eating, the greater the intention to use e-learning. The effect of facility conditions on the choice to use e-learning with a p-value of <0.001, then getting the predicate is very significant with a coefficient of 0.299. This shows that a good improvement in the facility's condition will further support the use of e-learning intentions.

3.1 Discussion

3.1.1 Social Influence on Facility Conditions

From the research results that have been carried out, the social influence on the facility's condition shows a positive coefficient of 0.575 with a p-value of <0.001 and obtains the predicate of highly significant. This indicates that the social influence on the state of the facility has a positive and significant effect. The use of e-learning has received support from the campus and lecturers and has received a touch of changes in the conditions of e-learning supporting facilities. The improved social influence will improve existing facilities. They are supported by Ismail's [30] study of the socio-economic changes experienced by the Karangploso community due to the construction of tourism facilities. The environment affects learning conditions [31].

3.1.2 Social Influence on Intention to Use E-Learning

From the research results, it was found that the social influence on the intention to use e-learning was 0.385 with a p-value of <0.001 and got the predicate of highly significant. This shows that the social impact on the choice to use e-learning has a positive and significant effect. The increasing social influence, the more the intention to use e-learning. Social influence is related to a person's perception, who thinks someone should do a certain behavior. High social influence results in high intentions in using new technology and systems. Someone who has no experience using technology tends to seek information from the surrounding environment, such as family, friends, and social media, to affect the data obtained. The use of e-learning has received support from various parties, both campuses, and lecturers, to use e-learning. It is proven that many lecturers have conducted lectures online, not only giving assignments or chatting.

The results of this study are supported by Destaningrum [32], showing a positive and significant influence between the social impact on intention to use e-learning. The greater the

social impact, the greater the choice to use e-learning. Like Permana's research [33], there is social influence on the intention to use positive and significant applications, the more social influence increases, the more the choice to use the application. The same result states that social influence positively and significantly affects user intention [34].

3.1.3 The Effect of Facility conditions on Intention to Use E-learning

From the research results that have been carried out, there is an effect of facility conditions on using e-learning of 0.299 with a p-value of <0.001 and obtaining the predicate as highly significant. This shows that the social influence on the intention to use e-learning has a positive and significant effect. The condition of the facility is related to internal and external perceptions which include self-confidence in technological facilities, environmental factors make an action to be carried out and how far innovation is perceived consistently according to potential needs and experience. The use of media in the form of e-learning can be exciting to learn and interact directly. The use of e-learning has gained very adequate facilities in the form of very fast Wi-Fi to be used.

This study's results are the same as those conducted by Haryanto [35], showing a positive and significant effect between the facility's condition on the intention to use. The state of adequate facilities makes it easier for users to access the Edmodo online learning system. This medium is evidenced by the hypothesis that there is a positive and significant effect between falsities' condition on the intention to use Edmodo [36]. This medium is also supported by Radiansyah's research [37] that the facility's state has a significant effect on the intention to use T-Cash. The facility's condition increases, so the choice to use will improve for application users [33].

4   Conclusion

On the results of testing the hypothesis that social influence has a positive and significant effect on the facility's condition. The social impact affects the intention to use e-learning positively and significantly. The facility condition is stated positive and meaningful towards the choice to use e-learning.

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