E-LEARNING LEARNING METHOD USING TECHNOLOGY ACCEPTANCE MODELING (TAM) FOR ACCOUNTING LEARNING

METODE PEMBELAJARAN E-LEARNING DENGAN MENGGUNAKAN TECHNOLOGY ACCEPTANCE MODELING (TAM) UNTUK PEMBELAJARAN AKUNTANSI

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Abstract

This study aims to develop an e-learning based learning model. By implementing e-learning learning design, both lecturers and students can more easily design and develop courses, especially those relevant to the needs of accounting learning in the Accounting Study Program, State University of Makassar. The main objective of this study is to identify factors that influenceThe success of e-learning through the Technology Acceptance Model (TAM) approach, encourages the optimization of e-learning utilization in the learning process, and increases the effectiveness of its use in the Makassar State University environment. The design of the e-learning learning system in this study refers to the TAM concept, which is a model that explains user acceptance of information technology systems. This model consists of five main constructs: perceived usefulness, perceived ease of use, attitude toward behavior, behavioral intention, and actual technology use. Hypothesis testing was carried out using the Structural Equation Modeling (SEM) method, through the stages of validity and reliability evaluation, model fit testing, latent construct coefficient analysis, and indirect and total effect testing. Of the seven hypotheses proposed, five were accepted, and other two hypotheses were rejected.

Keywords: E-Learning, technology acceptance model (TAM), structural equation modeling (SEM), accounting learning.

Abstrak

Penelitian ini bertujuan untuk mengembangkan model pembelajaran berbasis e-learning. Dengan penerapan desain pembelajaran e-learning, baik dosen maupun mahasiswa dapat lebih mudah merancang dan mengembangkan mata kuliah, khususnya yang relevan dengan kebutuhan pembelajaran akuntansi di Program Studi Akuntansi Universitas Negeri Makassar. Tujuan utama dari penelitian ini adalah untuk mengidentifikasi faktor-faktor yang memengaruhi keberhasilan pembelajaran e-learning melalui pendekatan Technology Acceptance Model (TAM), mendorong optimalisasi pemanfaatan e-learning dalam proses pembelajaran, serta meningkatkan efektivitas penggunaannya di lingkungan Universitas Negeri Makassar. Desain sistem pembelajaran e-learning dalam penelitian ini mengacu pada konsep TAM, yaitu suatu model yang menjelaskan penerimaan pengguna terhadap sistem teknologi informasi. Model ini terdiri dari lima konstruk utama: perceived usefulness, perceived ease of use, attitude toward behavior, behavioral intention, dan actual technology use. Pengujian hipotesis dilakukan dengan menggunakan metode Structural Equation Modeling (SEM), melalui tahapan evaluasi validitas dan reliabilitas, uji model fit, analisis koefisien konstruk laten, serta pengujian efek tidak langsung dan total efek. Dari tujuh hipotesis yang diajukan, diterima sebanyak lima, sementara dua hipotesis lainnya ditolak.

Kata Kunci: E-Learning, model penerimaan teknologi (TAM), pemodelan persamaan struktural (SEM), pembelajaran akuntansi.

INTRODUCTION

The e-learning learning system is an innovation in the world of education that has developed along with the advancement of information and communication technology. Through e-learning, the learning process is no longer limited to physical classrooms; students can follow learning flexibly, and educators do not have to be present in person to deliver the material. This learning model is considered capable of accelerating the achievement of learning objectives, so that time efficiency is better maintained. E-learning is also known as a learner-centered approach, which is able to improve the quality of learning, encourage learning independence, and strengthen interactions between lecturers and students. The comparison between conventional learning and e-learning-based learning is presented in the following table:

Table 1. Comparative Learning

No.	Face to Face Learning	E-Learning Based Learning
1.	Face to face meeting	No face to face required
2.	The time is according to schedule	The time can be anytime
3.	Need a classroom	No need for classroom
4.	The Dominant Role of Lecturers	The dominant role of students
5.	Possibility of passive students	Students tend to be more active
6.	Time limit	No time limit
7.	Students are learning depending on the teacher	Students learn independently
8.	Teaching Materials from Lecturers	Material can be updated independently
9.	Lecturer as the subject	Students as subjects

Various universities have designed and developed e-learning-based learning models as an effort to support and complement conventional education systems. This step aims to optimize the use of information technology in the process of organizing education. One form of implementation is the use of an e-learning system based on the Modular Object Oriented Dynamic Learning Environment (MOODLE), which is web-based software designed to support online learning through a social constructivism pedagogical approach. In its implementation, Moodle is used as the main platform in digital learning activities. This application is open source with a GNU license and can be run on various operating systems that are compatible with PHP and support SQL databases.

The Technology Acceptance Model (TAM) was developed by Davis in 1985 as an adaptation of the Theory of Reasoned Action (TRA) previously developed by Fishbein and Ajzen. In TAM, there are two main constructs, namely perceived usefulness and perceived ease of use. The usefulness construct refers to the level of individual belief that the use of a system will improve their performance, while ease of use describes the belief that the system can be used easily without requiring great effort (Jogiyanto, 2008). Along with its development, the Technology Acceptance Model (TAM) has been refined through the addition of a number of external factors, among themself-efficacy, level of complexity, and lack of time. The TAM analysis approach is useful for identifying factors that influence perception of the usefulness of a system, which then has an impact on the level of acceptance and use of e-learning. Until now, Makassar State University has not implemented the TAM model

as a basis for providing e-learning programs in learning activities.

Along with the rapid development of information technology in the Industrial Revolution 4.0 era, the need for innovation in learning methods has become a necessity. In the Accounting Department of Makassar State University, the implementation of e-learning has become an important part of the transformation of learning. The use of e-learning in accounting learning provides new dynamics that are in line with various technological advances. If utilized optimally, e-learning has the potential to significantly increase learning outcomes. Some of the benefits of e-learning in the context of accounting learning include:

1. E-learning can shorten learning time,
2. E-learning facilitates interaction between students and lecturers and teaching materials,
3. Students can share information with each other and can access learning materials at any time and repeatedly, so that students have a better grasp of the learning materials.
4. With e-learning, the process of knowledge development does not only occur in the classroom.

E-learning is an appropriate and efficient alternative for the world of education in Indonesia, especially at the tertiary level, in order to support equal access to education and improve the quality of learning. In the Accounting Study Program of Makassar State University, the implementation of e-learning provides a number of advantages, including:

1. Flexibility of time and location
   In contrast to conventional learning which requires students to be physically present in class at certain times, e-learning allows students to access learning materials. Anytime and anywhere according to their time availability and conditions.
2. Independence in learning
   Through e-learning, students have the freedom to organize their own learning process. They can determine their own time to start and finish learning, and choose the order of modules they want to study first. If they encounter difficulties, they also have the opportunity to repeat the material until they really understand it.
3. Cost efficiency

   E-learning based learning can reduce various expenses that are usually needed in face-to-face learning. Savings can be obtained from reduced transportation and accommodation costs, as well as efficiency in administrative management and provision of physical learning facilities and facilities.

The use of e-learning in the Accounting Study Program is still relatively low based on researchers' observations, even though students are the main users. Therefore, it is necessary to analyze the factors that influence-learning usage with the Technology Acceptance Model (TAM) framework. Flourensia's (2017) research entitled Analysis of E-Learning Acceptance Using the Technology Acceptance Model (TAM) found that perceived ease of use has a positive impact on both perceived usefulness and attitudes toward the system; the easier a system is to use, the greater the perceived benefits and the higher the level of acceptance. Meanwhile, another

study by Solar Research, U.S. (2017) entitled Analysis of E-Learning System Acceptance Using the Technology Acceptance Model (TAM) showed that attitudes toward technology (Attitude Toward Using) influence Actual Usage; in other words, a more positive attitude encourages higher adoption of e-learning. Based on this background, the research entitled E-Learning Learning Method Using Technology Acceptance Model (TAM) is important to be implemented. This research aims to identify the determinants of the success of e-learning implementation through the TAM approach, optimize the use of e-learning in the learning process at Makassar State University, and increase the effectiveness of e-learning use in teaching and learning activities in the university environment.

LITERATURE REVIEW AND HYPOTHESES

E-learning is a form of learning that utilizes electronic technology as a medium for delivering information. Its implementation can be in the form of technology-based learning, such as the use of audio and video, or web-based learning supported by computer devices and internet connections. The most common definition of e-learning is given by Clark, Colvin, Richard, and Mayer (2011) who state that e-learning is a form of learning delivered through digital devices, such as computers or gadgets, which are designed to support the learning process.

According to Rusman (2012), e-learning is a form of learning that is carried out with the help of electronic devices. Therefore, the implementation of e-learning includes the use of computers and other digital devices. On the other hand, Rosenberg (2002) describes e-learning as a way of utilizing internet technology in delivering learning materials widely, which is based on three main criteria, namely:

1. E-learning is a network-based system that enables efficient updating, storage, distribution, and exchange of learning materials or information.
2. Learning materials are delivered to end users via computer devices by utilizing commonly used internet technology.
3. E-learning is based on a broader and more flexible learning approach compared to conventional learning paradigms.

The educational approach that combines information technology in the learning process is known as e-learning. E-learning is a form of electronic-based learning, one of the media of which uses a computer network connected to the internet. One of the platforms that is widely used to support the e-learning process is the Modular Object oriented Dynamic Learning Environment (Moodle), which is an open source Learning Management System (LMS) developed by Martin Dougiamas and can be accessed for free via the page http://moodle.org. Moodle is a web-based software that provides facilities for lecturers, instructors, and educators to compile and manage learning materials online (Dvorak, 2011). Surjono (2013) explains that Moodle supports the implementation of e-learning based on an integrated approach, Where Various learning support features can be easily integrated into one portal. These features include assignment preparation, quiz creation, communication and collaboration facilities, and the ability to upload materials in various file formats.

Meanwhile, the Technology Acceptance Model (TAM) was first introduced by Davis in 1985 (Jogiyanto, 2008). The main advantage of TAM lies in the simplicity of

its model which still has high validity. TAM is a theory that explains user behavior in accepting and using information technology systems, and is widely considered influential in technology adoption studies. In this model, user acceptance of the system is influenced by two main constructs, namely perceived usefulness and perceived ease of use. These two constructs are the most prominent aspects in the structure of the TAM model, as depicted in the following illustration:
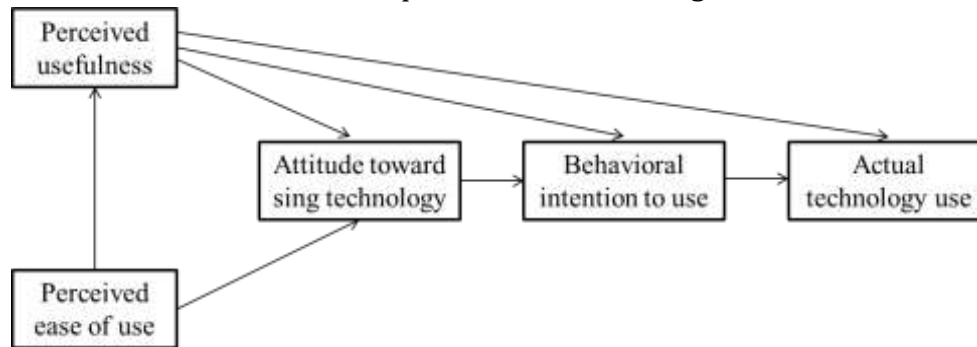

Figure 1. TAM Model

Source: Behavioral Information Systems, 2008.

TAM has 5 main constructions, namely:

1. Perceived usefulness
2. Perceived ease of use
3. Attitudes towards the use of technology
4. Behavioral intention to use
5. The actual use of technology

The description of each construct in the Technology Acceptance Model (TAM) is as follows: The first construct, perceived usefulness, refers to an individual's belief in the extent to which an information system can provide benefits in decision making. If the user believes that the system provides utility, then he or she tends to use it. Conversely, if it is considered less useful, then the system is likely not to be used. The second construct is perceived ease of use, which is often referred to as ease of use. This construct describes the extent to which a person believes that using an information system does not require a great deal of effort. If the system is perceived as easy to use, then the user will be encouraged to use it. However, if the system is considered complicated, then the user tends to be reluctant to use it. The third construct is attitude toward using technology, which refers to a person's positive or negative feelings or tendencies towards using a system when asked to use it. The fourth construct, behavioral intention to use, indicates a person's desire or intention to use technology in the future. This intention is influenced by attitudes toward technology and perceptions of its usefulness, and directly contributes to actual use. The fifth construct is actual technology use, which is the real behavior or actual use of the technology. The TAM model has several advantages, including:

1. This is a useful behavioral model for addressing many information technology system failures.
2. The TAM model has been tested with many studies and the results concluded that TAM is a good model.
3. TAM is a simple but valid parsimony model.

Based on a review of several previous studies, it is obtained that perception has a positive and significant effect on the utilization of information systems (Davis, 2008; Chau, 1996). In addition, several findings also reveal that the construct of perceived ease of use is related to perceived usefulness, attitude, intention, and actual use behavior. In Davis's (1989) study, attitude toward a behavior is explained as an individual's emotional reaction—either in the form of acceptance or rejection—when faced with a particular action. The results of previous studies indicate that this attitude contributes positively to the intention to act. Furthermore, behavioral intention has been proven to be a fairly reliable indicator in predicting user tendencies in adopting a technology, as evidenced by the studies of Davis (1989) and Taylor and Todd (1995). Based on the theoretical basis and empirical evidence, the formulation of the hypothesis to be tested in this study is as follows:

- H1 : Perceived Ease of Use influences Perceived Usefulness in the use of E-Learning at Makassar State University.
- H2 : Perception of Usefulness has a positive influence on Attitudes Towards the Use of E-Learning at Makassar State University
- H3 : Perception of Ease of Use influences Attitude Towards Use in the Utilization of E-Learning at Makassar State University.
- H4 : Perceptions regarding the use of e-learning influence the intention or desire to use e-learning at Makassar State University.
- H5 : Perception of the usefulness of e-learning has a positive impact on the intention to use it at Makassar State University.
- H6 : Behavioral intention has an influence on the actual use of e-learning at Makassar State University.
- H7 : Perception of the usefulness of e-learning contributes positively to the actual level of utilization of the e-learning system at Makassar State University.

RESEARCH METHODS

This research was conducted at Makassar State University located on Jalan A.P. Pettarani, Tidung Village, Rappocini District, Makassar City, South Sulawesi Province. The subjects in this study included all students of the Accounting Study Program who used the e-learning system. The study program applies a blended learning model, with a composition of 60% face-to-face learning and 40% e-learning-based learning. The e-learning platform used was Moodle. The data collection technique was carried out by distributing questionnaires to students who used e-learning. Data collection took place for two weeks through an online questionnaire compiled using Google Form. The distribution of questionnaires was carried out online through the Head of the Study Program who then forwarded it to students. Based on the theories that have been studied in the literature review, the operational definition of each variable in this study was compiled referring to Jogiyanto's opinion (2008) and is explained as follows:

1. Perceived Usefulness: This is an individual's belief that the use of a technology will contribute to increasing the effectiveness and quality of their performance.
2. Perceived Ease of Use: Describes the extent to which a person believes that technology can be used easily, without requiring excessive effort.
3. Attitude Toward Behavior: This is defined as a person's tendency to have positive or negative feelings towards their desire to use an information technology

system.

4. Behavioral Intention: Refers to an individual's desire or drive to perform a particular action, in this case the use of a system.
5. Actual Technology Use: the actual actions of a person in using an information technology system, which reflects the user's behavior directly in the context of the system's implementation.

In this study, the data collection technique used was the questionnaire method. This approach is a way to obtain direct information from respondents through a series of questions that are systematically designed to explore data related to research variables (Silalahi, 2009). Each variable is measured using five indicators. The research instrument is arranged based on a Likert scale with five levels, where the lowest score is 1 and the highest score is 5. The available answer options include "strongly agree", "agree", "disagree", and "strongly disagree". The Likert scale was chosen because it is considered effective in representing the level of attitude or perception of respondents towards a statement (Silalahi, 2009). The data obtained from this measurement is included in the interval data category. Details of indicators for each variable along with their measurement scales are presented in the following table:

Table 2. Research Instrument Grid

No.	Build	Indicator	Measuring Scale
1.	Perceived Ease of Use (PEU)	a. Ease of learning b. Easy to understand c. Very easy, very skillful d. Easy to use e. Easy to handle f. Easy to remember (Davis, 1989; Chau, 1996)	Likert scale
2.	Perceived Usefulness (PU)	a. Faster b. Improve performance c. Increase productivity d. Increase effectiveness e. It's easier f. Beneficial (Davis, 1989; Chau, 1996)	Likert scale
3.	Attitude Towards Use (ATU)	a. Happiness b. Enjoy c. Boredom d. Dislike (Davis, 1989)	Likert scale
4.	Behavioral Intention (BI)	a. Use anytime b. Using any condition c. Use continuously d. Intention to use continuously e. Looking forward to using it (Davis, 1989); Taylor & Tood, 1995)	Likert scale
5.	Actual Use (AU)	a. Real use b. Frequency of use c. Use satisfaction (Igbaria et al., 1995)	Likert scale

The instruments used in the research must have an adequate level of validity. An instrument is declared valid if it can accurately measure things that are the focus

of the measurement (Sugiyono, 2013). Validity testing aims to assess the extent of the quality of the questionnaire as a tool in data collection. An instrument is considered valid if it is able to provide measurement results that are in line with the research objectives and is able to reflect the data precisely and accurately.

To test the hypothesis in this study, the Structural Equation Modeling (SEM) method was used, processed using WarpPLS software. This statistical analysis technique was chosen because it has several advantages (Hair et al., 2010). First, SEM-PLS is suitable for use in research models involving latent constructs, namely variables that cannot be measured directly, and considering the possibility of measurement errors. Second, this method allows simultaneous testing of causal relationships between several dependent variables in one model, as is the structure in this study.

Validity and Reliability of Instruments

Convergent validity is one of the important components in the measurement model, known as the outer model in the SEM-PLS approach, and called confirmatory factor analysis (CFA) in covariance-based SEM. To determine whether the outer model has met the criteria for convergent validity in the reflective construct, two main indicators are used. First, each indicator must have a loading factor value above 0.70. Second, the significance value (p-value) must be less than 0.05 (Hair et al., 2013).

Reliability testing is a stage to assess the extent to which a measurement instrument is reliable and provides consistent results in measuring certain variables. In this study, reliability testing was conducted to ensure that the questionnaire used has met the requirements as a reliable measuring instrument. An instrument is said to be reliable if the composite reliability and Cronbach's alpha values obtained exceed the minimum limit of 0.70.

Assessing Model Suitability Criteria

Testing the suitability between theoretical models and empirical data can be done through Goodness-of-Fit statistical analysis. A model is said to be fit if the covariance matrix of the model shows similarity to the covariance matrix of the actual data. In the WarpPLS application, the level of model suitability can be known through the general results output, which presents an assessment based on the goodness-of-fit index and significance value (p-value). This assessment includes three main indicators used to measure the level of model suitability, namely:

- The average path coefficient (APC) has a P value < 0.05.

- Average R-Squared (ARS) has a value <0.05

- The average variance inflation factor (AVIF) has a value <5

Output Let Variable Coefficients

In model evaluation, the coefficient of determination is expressed through the R-Squared value, which shows the percentage of endogenous construct variation that can be explained by the assumed influential exogenous construct. A higher R-Squared value indicates that the model has better explanatory power. On the other hand, Q-Squared is a non-parametric measure obtained through a blindfolding procedure and functions to assess the predictive validity or relevance of the

predictor latent variables to the predicted construct. Although its purpose is similar to R-Squared, Q-Squared is calculated using a resampling technique and, unlike R-Squared which is always positive, Q-Squared can be negative.

Output Indirect and total effects

This output is one of the important components, especially in mediation analysis. One of the advantages of using WarpPLS is its ability to automatically calculate the value of the indirect effect coefficient and its significance, so that researchers do not need to do the calculation manually.

RESULTS AND DISCUSSION
Data Description

The questionnaire was distributed online through social media, and successfully collected 42 responses. The respondents who participated in filling out the questionnaire were students of the Accounting Study Program from various batches who were studying in the even semester.

Data analysis

Validity and Reliability of Instruments

The results of data analysis using WarpPLS software show that there are two main criteria used to determine whether the outer model meets the requirements of convergent validity on the reflective construct. These criteria include: the loading value of each indicator must be more than 0.70 and the significance value (p-value) must be less than 0.05 (Hair et al., 2013).

Table 3. Extracted mean variance

Extracted mean variance				
SMALL	CAN	AGAIN	WITH	ON
0.738	0.740	0.798 years	0.728	0.742

Based on these results, it can be concluded that the measurement of the construct has met the criteria of convergent validity. The next stage of analysis is the test of construct reliability, which is evaluated through two indicators, namely composite reliability and Cronbach's alpha. A construct is considered reliable if its composite reliability value exceeds 0.70. The following is the output of the coefficient test results from the latent variables.

Table 4. Composite reliability coefficient

Composite reliability coefficient				
SMALL	CAN	AGAIN	WITH	ON
0.913	0.945 years	0.796	0.930	0.0896 years

Source: Data processing results, 2020.

Model Suitability Criteria
Table 5. Model fit index and P value

Rat rat Track Coefficient (APC)	0.475 years	p value < 0.001
Rat rat R-Square (ARS)	0.612	p value < 0.001

Rat rat Difference Inflation Factor (AVIF)	2.706	Good if < 5	

Source: Data processing results, 2020.

The significance value (p-value) for the Average Path Coefficient (APC) and Average R-squared (ARS) were recorded below 0.05, indicating significant results. Meanwhile, the Average Variance Inflation Factor (AVIF) value, which is used to measure the level of multicollinearity, must be below 5 to be accepted. Based on the results of the analysis output, the model has met the goodness of fit criteria, with an APC value of 0.475 and an ARS of 0.612, both indicating significance. The AVIF value of 2.706 is also still within acceptable tolerance limits.

Output Let Variable Coefficients

Table 6. The output shows the coefficients of the variables

	SMALL	CAN	AGAIN	WITH	ON
R-Square		0.674	0,538	0.691	0.546 years
composite reliability	0.913	0.945 years	0.796	0.930	0.896
Alfa Cronbach	0.886	0,929	0.760	0.905 years	0.824
December. Where. Extract	0.638	0.740	0,598	0.728	0.742
Collin is full. Vif	3.385	3.988	2.473	4.300	2.700
Q-Square		0.678 years	0.565 years	0.706	0.563 years

Source: Data processing results, 2020.

Table 6 above also displays two indicators, namely composite reliability and Cronbach's alpha. Both indicators must obtain a value above 0.70 to be said to meet the reliability requirements (Fornell & Larcker, 1981). Based on the output results, the instrument used has met these criteria because all of its values are above the threshold of 0.70. In addition, the Average Variance Extracted (AVE) value is used to assess convergent validity, with the provision that its value must exceed 0.50. The results shown indicate that this criterion has also been met.

Indirect Effect Output and Total Impact

Table 7. Indirect Impact and Total Impact

Indirect and total impact					
	SMALL	CAN	AGAIN	WITH	ON
SMALL					
CAN					
AGAIN	0.276 years				
WITH	0.600	0.123			
ON	-0,129	0,359	0,255		
Number of lines with 2 segments					
	SMALL	CAN	AGAIN	WITH	ON
SMALL					

CAN					
AGAIN	1				
WITH	1				
ON	1	1	1		
P value of indirect effect for a path with 2 segments					
	SMALL	CAN	AGAIN	WITH	ON
SMALL					
CAN					
AGAIN	0.140				
WITH	<0,001	0.216			
ON	0,315	0,011	0.042 years		

Source: Data processing results, 2020.

The output presented in Table 7 is one of the important results, especially in mediation analysis. This table is one of the advantages of using WarpPLS because it makes it easier for researchers to obtain the value of the indirect effect coefficient along with its significance level without having to do manual calculations. Based on the estimation results, the indirect effects of Perceived Ease of Use (PEU) on Attitude Toward Use (ATU), Behavioral Intention (BI), and Actual Technology Use (AT) are 0.267; 0.600; and -0.129, respectively.

Hypothesis testing

H1 : Perception of ease of use has been shown to have an influence on perception of usefulness in the context of e-learning utilization at Makassar State University (UNM). The results of data analysis show that the p value <0.1, or is below the 5% significance level, so it can be concluded that the relationship is significant. The level of influence is indicated by the coefficient of determination (R^2) value of 0.67 or 67%. Thus, the first hypothesis in this study can be accepted. These results are consistent with the findings of Flourensius (2017), who also revealed an influence between perception of ease of use and perception of usefulness, although in his study a lower R^2 value was obtained, which was 30%.

H2 : Perceived usefulness shows a positive influence on attitudes in using e-learning at Makassar State University (UNM). However, the results of data analysis indicate that the significance value obtained is p = 0.14, which exceeds the 5% significance limit. Therefore, it can be concluded that the influence is not significant, so the second hypothesis in this study is rejected. Although the relationship between the variables is positive, the level of significance is not sufficient to support the hypothesis. This finding is different from the results of Flourensia's (2017) study, which also rejected a similar hypothesis, but with a different direction of influence.

H3 : Perceived ease of use is known to have no significant effect on attitudes towards using e-learning at Makassar State University (UNM). The results of data analysis show that the significance value obtained is p = 0.08, which exceeds the significance limit of 5%. Thus, it can be concluded that the relationship between the two variables is not significant, so the third hypothesis in this study is rejected. This finding is not in line with the results of

Flourensia's (2017) study, which accepted a similar hypothesis, and is also different from the results of a study by Surya Ade Saputra (2017), which found that perceived ease of use significantly influence attitude towards the use of e-learning.

H4 : Attitude towards use is proven to have a positive and significant influence on behavioral intention in using e-learning at Makassar State University (UNM). Based on the results of the analysis, the significance value obtained is p = 0.05, right at the 5% significance limit, which indicates a significant relationship between the two variables. This influence is reflected in the coefficient of determination (R^2) value of 0.69 or 69%. Thus, the fourth hypothesis in this study is declared accepted. This finding is consistent with the results of Flourensia's (2017) study, which also accepted a similar hypothesis, although the R^2 value in her study was lower, which was 44%.

H5 : Perception of usefulness shows a significant positive influence on behavioral intention in using e-learning at Makassar State University (UNM). The results of data analysis show that the significance value of $p < 0.1$ or is below the threshold of 5%, which indicates that the relationship between the two variables is significant. This level of influence is reflected in the coefficient of determination (R^2) value of 0.69 or 69%. Therefore, the fifth hypothesis in this study is declared accepted. This finding is different from the research conducted by Flourensius (2017), Where Similar hypothesis is not accepted.

H6 : Behavioral intention is proven to have an effect on the actual use of the system in the utilization of e-learning at Makassar State University (UNM). Based on the results of the analysis, a p value of <0.1 or below the 5% significance limit was obtained, indicating that the effect is significant. The magnitude of the contribution of the effect is indicated by the coefficient of determination (R^2) value of 0.55 or 55%. Thus, the sixth hypothesis in this study is declared accepted. This finding is in line with the results of Flourensius's (2017) research, which also supports a similar hypothesis, although the study recorded a higher level of effect, namely R^2 of 94%.

H7 : Perceived usefulness has a positive effect on the actual use of the system in utilizing e-learning at UNM. Based on the results of data processing, a significance value of p = 0.31 was obtained. Although this value is actually above the 5% significance limit, the statement states that the influence is considered significant, with a determination coefficient value of R^2 of 0.55 or 55%. Therefore, the seventh hypothesis in this study is declared accepted. This result is different from the study conducted by Surya Ade Saputra (2017), where a similar hypothesis was not accepted.

Table 8. Summary of hypothesis results

Variable Relationship	Information
H1: The Effect of Ease of Use on Perception Its use.	Accepted
H2: The Influence of Perceived Usefulness on Attitudes Towards Use.	Rejected
H3: The Effect of Ease of Use on Attitude Towards Usage.	Rejected
H4: Attitude towards Use influences Behavioral	Accepted

Intention.	
H5: Impact of Perceived Usefulness on Behavior Meaning.	Accepted
H6: The Influence of Behavioral Intention on Actual System usage.	Accepted
H7: Effect of Perceived Usability on Actual System usage.	Accepted

CONCLUSION, IMPLICATIONS, SUGGESTIONS, AND LIMITATIONS

This study proposes seven hypotheses, with five among them were accepted (H1, H4, H5, H6, and H7), while the other two (H2 and H3) were rejected. The implementation of e-learning in learning activities has been proven to have a positive impact felt by users. The results of the study indicate that perceptions of ease of use of technology contribute positively to perceptions of system usefulness. However, this finding is not fully reflected in user attitudes, indicating that positive perceptions of technology have not fully driven system usage behavior. On the other hand, this study also revealed that attitudes toward the use of technology have a positive effect on intentions or intentions to behave.

Overall, e-learning has shown a real role as a form of technology implementation in the field of education. However, this study still has several limitations, one of which is that it has not included external variables such as gender, user experience, level of system complexity, and aspects of voluntariness in technology adoption. Therefore, it is recommended that further research can expand the scope by considering these external factors. In addition, future research is also recommended to explore other forms of internet technology utilization in the learning process.

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