BEHAVIOR ANALYSIS OF THE USE OF E-LEARNING USING UTAUT MODEL APPROACH (CASE STUDY: STMIK MIKROSKIL)

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ABSTRACT

E-learning has become one of the factors that needed by universities to be able to compete and survive. Electronic learning (e-learning) using Internet and digital technologies to create experience in educating others. E-Learning in STMIK Mikroskil used to help students and lecturers in teaching and learning process. This study uses the UTAUT (Unified Theory of Acceptance and Use of Technology) model. The aim is to analyze the tendency of users of e-learning systems at STMIK Mikroskil Medan, by testing whether Behavioral Intention and Behavior to Use a technology are influenced by Performance Expectancy, Effort Expectancy, Social Influence, and Facilitating Conditions. These four factors are moderated by gender, experience, and voluntary factors. Questionnaire data were collected from 346 active students and analyzed by structural equation modeling (SEM) using AMOS 24. The results of this study showed Performance Expectation Factors, Effort Expectation Factors, Social Influence Factors had a positive effect on Behavioral Intention, Facilitating Conditions Factors had a positive effect on Use Behavior, Behavioral Intention has a significant influence on Use Behavior. Gender does not have a moderating effect that affects the factors of Performance Expectation and Effort Expectancy on Behavioral Intention, but Gender has a moderating effect that affects Social Influence factors towards Behavioral Intention. Experience does not have a moderating effect that influences Business Expectancy factors on Behavioral Intention. However, experience has a moderating effect that influences Social Influence factors that have a positive effect on Behavioral Intention. Experience also has a moderating effect that affects the Facilitating Conditions factor for Use Behavior. Voluntariness has a moderating effect that affects Social Influence factors towards Behavioral Intention.

Keywords: *E-Learning, Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, Unified Theory of Acceptance and Use of Technology (UTAUT)*

1. INTRODUCTION

E-learning has become one of the factors needed by universities to be able to compete and survive. Electronic learning (e-learning) is the use of Internet and digital technologies to create experience in educating others. The use of technology especially e-learning is now widely used as a tool in the lecture process to facilitate students in absorbing lecture material.

Through e-learning, students can get lecture material, collect assignments, work on online quizzes, get notifications about deadlines for collecting assignments / quizzes, interact and discuss with fellow students and lecturers at E-Learning forums through the internet, anytime and where just without being limited by space and time.

This study wants to prove whether e-learning can improve the efficiency of student learning in other words students expect by using e-learning to be useful for their learning activities. And this study

also wants to prove whether students tend to use the e-learning system because e-learning is easy to use and understand, also to prove whether there is an influence of the surrounding environment which causes students to tend to use e-learning. Then is the influence of the availability of resources or facilities needed for elearning making students tend to use e-learning in their learning activities.

This study aims to understand the tendency of student behavior towards e-learning systems, this study uses the UTAUT model (Unified Theory of Acceptance and Use of Technology) because this model is in accordance with the factors that want to be proven in this study is a model for explaining Use Behavior towards information technology. Because this model is a combination of eight models that have been successfully developed before. The UTAUT model shows that the intention to behave and behavior to use a technology is influenced by

Performance Expectancy, Effort Expectancy, Social Influence, and Facilitating Conditions. Fourth these factors are moderated by gender, age, experience and voluntary factors using

2.   LITERATURE REVIEW

E-Learning system is a form of distance education that uses electronic media as a medium for delivering material and communication between instructors and students. E-Learning is learning method through the internet, its components are presented in many formats, experience-based learning arrangements, and community networks of learners, also involved developers and experts. E-Learning provides rapid learning by reducing costs, increasing access to teaching and learning, and clear accountability for all users involved in the learning process [2]. E-Learning facilitates interaction between students with material / subject matter and with lecturers / instructors / teachers [2].

The Unified Theory of Acceptance and Use of Technology (UTAUT) was developed by Venkatesh, et al. (2003). UTAUT is a combination to perfect eight other behavioral theories in explaining user acceptance of information systems. Eight theories and models of behavioral information systems are [1]:
1.   Theory of Reasoned Action (TRA) by Fishbein and Ajzen (1975).
2.   Technology Acceptance Model (TAM) by Davis et al. (1989).
3.   Motivational Model (Motivational Model or MM) by Davis et al (1992).
4.   Planning Behavior (Theory of Planned Behavior or TPB) by Ajzen (1991). Combined TAM and TPB Models (a Model Combaining the Technology Acceptance Model and the Theory of Planned Behavior or TAM + TPB) by Taylor and Todd (1995).
5.   Combined TAM and TPB Models (a Model Combaining the Technology Acceptance Model and the Theory of Planned Behavior or TAM+TTPB) by Taylor and Todd (1995). Model of PC (Model of PC Utilization or MPCU) Utilization by Thompson et al. (1991).
6.   Innovation Diffusion Theory (IDT) by Moore and Benbasat (1991).
7.   Social Cognitive Theory by Compeau and Higgins (1995).
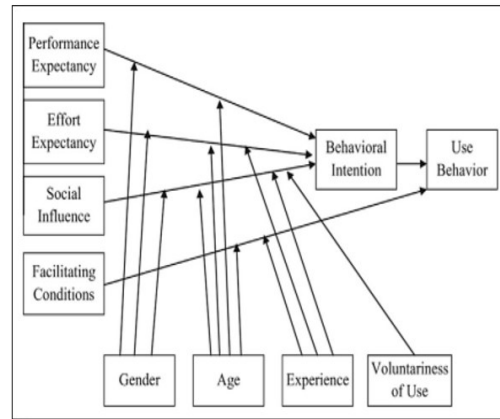The following is the UTAUT model can be seen in the picture below:

Figure 1. UTAUT Model

The UTAUT model has four main variables that play an important role as factors that directly determine the intention to behave and use behavior, namely Performance Expectancy, Effort Expectancy, Social Influence and Facilitating Conditions. The UTAUT model also has four moderator variables, namely gender, age, experience and voluntariness of use, these four moderator variables can influence the weakness of the main variables that link behavioral intention and use behavior [1], [3], [4], [5], [6], [7].

This research was conducted to analyze the trends of system users using the UTAUT Model. This model is used to test whether behavioral intentions and behavior to use a technology are influenced by Performance Expectancy, Effort Expectancy, Social Influence, and Facilitating Conditions. Fourth these factors are moderated by gender factors, experience seen from the semester of how many students to determine how long to use E-Learning and volunteer use.
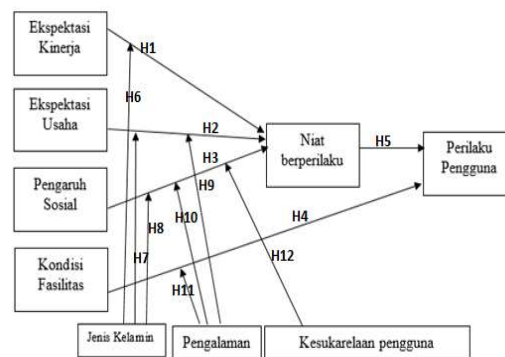

Figure 2 Research Model

The following is an explanation of the variables in UTAUT:
1.   Performance Expectancy

Performance Expectancy is the level of individual trust that the use of an existing system can help them to get a benefit that can help simplify their work [8].

2.   Effort Expectancy

 Effort Expectancy is defined as the level of ease of use of the system that can help reduce the effort (energy and time) of the individual in completing the work. The ease of use can lead to feelings of interest in a person that the system has usefulness and creates a sense of comfort when using it [8].

3.   Social Influence

Social Influence is defined as the degree to which the environment influences prospective users to use new technology, the greater the interest that arises in individuals to use information technology because of strong environmental influences [8].

4.   Facilitating Conditions

Facilitating Conditions are a reminder of individual beliefs about infrastructure and supporting facilities owned by companies or organizations available to support the use of existing systems [8].

5.   Intention to behave

The intention to behave or intention to use information technology is defined as the level of desire of users to utilize existing systems continuously with the assumption that they have access to information. The UTAUT model proves that usage intention is directly influenced by Performance Expectancy, Effort Expectancy and Social Influence [8].

6.   Use Behavior

Use Behavior is defined as the intensity or frequency of users in using information technology. Use Behavior depends on the impression of the user on the system offered. The system will be used if the user is interested in using and has confidence that the technology provides benefits in helping his work, can be used easily and the presence of social influences from the surrounding environment [6].

7.   Gender

Gender is a variable that states the gender of the user.

8.   Experience

Experience is a variable that states the level of user experience using the system.

9.   Voluntariness of use

Voluntariness of use a variable that states the level of volunteerism of users using the system.

3.   METHOD

This research follows the following stages:

1)   Identify and formulate the problem to be studied
2)   Conduct relevant theory studies
3)   Designing a Research Model
4)   Arrange Questions in the Questionnaire
5)   Collecting Data
6)   Perform Statistical Analysis
7)   Discussion of Results
8)   Conclusions & Suggestions

Conduct relevant theoretical studies to find relationships between variables and build a research model. The following relationship is found

1)   Performance Expectation factor (EK) has a positive effect on Behavioral Intention (NB). The more trusted the use of the existing system can help them to get a benefit that can help facilitate the work more intend to use the system. The relationship between these two variables is supported by research findings [7], [6], [9], [10], [5], [3], [11], [12], [4], [13].

2)   Effort Expectancyfactors (EU) have a positive effect on Behavioral Intention (NB) The more students feel easy in using the e-learning system, the more benefits students can receive until the greater the student's intention to be more likely to use the e-learning system. The results of this study are supported by various studies such as research [14], [9], [10], [12].

3)   Social Influence (PS) factors have a positive effect on Behavioral Intention (NB). The stronger the Social Influence of people in the environment around students to use the elearning system, the more likely students are to use the e-learning system. The results of this study are supported by various studies such as research [6], [14], [9], [10], [3], [12], [13].

4)   Facilitating Condition (KF) factor has a positive effect on Use Behavior (PP). The more students feel confident that the infrastructure and supporting facilities possessed to access the e-learning system are supported and available very well by Mikroskil, will affect students' behavior to want to use these facilities to access the e-learning system. The results of this study are supported by various studies such as research [7], [6], [14], [9], [3], [11], [12], [4], [13].

5)   Behavioral Intention (NB) has a significant influence on Use Behavior (PP)

The higher the value of Behavioral Intention, the higher the value of Use Behavior. The lower the Behavioral Intention value, the lower the value of Use Behavior. The more students have the intention or desire of users to use the existing e-learning system continuously with the

assumption that they have access to information. The results of this study are supported by various studies such as research [10], [11].

6) Gender has a moderating effect that affects the Performance Expectation (EK) factor on Behavioral Intention (NB). Sex differences have a significant influence on trust in the use of the existing system can help them to get a benefit that can help facilitate the work more intend to use the system. The results of this study are supported by various studies such as research [10].

7) Gender has a moderating effect that influences the Effort Expectation (EU) factor on Behavioral Intention (NB). Sex differences have a significant influence on the feeling of ease in using the system with many acceptable benefits until the greater the intention of students to be more likely to use the system. The results of this study are supported by various studies such as research [10].

8) Gender has a moderating effect that affects the Social Influence (PS) factor on Behavioral Intention (NB). Gender differences have a significant influence on social influence from people in the environment around students to use the system, the more likely the user intends to use the system. . The results of this study are supported by various studies such as research [10].

9) Experience has a moderating effect that influences the factors of Effort Expectancy (EU) on Behavioral Intention (NB). Experience differences have a significant effect on the feeling of ease in using the system with many benefits that can be accepted until the user tends to use the system. The results of this study are supported by various studies such as research [10].

10) Experience has a moderating effect that influences Social Influence (PS) factors that have a positive effect on Behavioral Intention (NB). Differences in experience have a significant influence on social influence from people in the environment around students to use the system, the more likely the user intends to use the system. The results of this study are supported by various studies such as research [10].

11) Experience has a moderating effect that affects the Facilitating Condition (KF) factor for Use Behavior (PP). Experience differences have a significant influence on the belief in the infrastructure and supporting facilities possessed to access the e-learning system supported and available very well by Mikroskil, will affect students' behavior to want to use these facilities to access the system. The results of this study are supported by various studies such as research [10].

12) Volunteerism has a moderating effect that affects the Social Influence (PS) factor on Behavioral Intention (NB). The difference in Voluntariness has a significant influence on the Social Influence of people in the environment around students to use the system with the more likely the user intends to use the system. The results of this study are supported by various studies such as research [10].

Hypothesis to be tested in this study are:
H1 :Performance Expectation Factor (EK) has a positive effect on Behavioral Intention (NB)
H2 : Effort ExpectancyFactor (EU) has a positive effect on Behavioral Intention (NB)
H3 : Social Influence Factor (PS) has a positive effect on Behavioral Intention (NB)
H4 : Facilitating Conditioning Factors (KF) have a positive effect on Use Behavior (PP)
H5 : Behavioral Intention (NB) has a significant influence on Use Behavior (PP)
H6 : Gender has a moderating effect that affects the Performance Expectation (EK) factor on Behavioral Intention (NB).
H7 : Gender has a moderating effect that influences the Effort Expectancy(EU) factor on Behavioral Intention (NB).
H8 : Gender has a moderating effect that affects the Social Influence (PS) factor on Behavioral Intention (NB).
H9 : Experience has a moderating effect that influences the Effort Expectancy(EU) factor on Behavioral Intention (NB).
H10 : Experience having a moderating effect that affects Social Influence (PS) factors has a positive effect on Behavioral Intention (NB).
H11 : Experience has a moderating effect that affects the Facilitating Condition (KF) factor for Use Behavior (PP).
H12 : Volunteerism has a moderating effect that affects the Social Influence (PS) factor on Behavioral Intention (NB)

        The research questionnaire will be distributed to research respondents in this case STMIK Mikroskil students. Questionnaires were distributed using the method of returning stratified random samples to collect student data. Questionnaire differentiation to students, both those who majored in Informatics, Information Systems,

and Information Management, aims to obtain proportional samples. Data analysis in this study uses the SEM (model*Structural Equation Modeling*)with the AMOS 24 application. *Structural Equation Modellling* (SEM) is a combination of two separate statistical methods namely*factor analysis*developed in psychology and psychometrics and simultaneous equation models (*simultaneous equation modeling*) developed in econometrics [15]. Questionnaire questions are divided into 2 parts, namely:

1. Questions about identity of the respondent related to department, class, gender, how long have you used *e-learning,* voluntariness.
2. Statement about research variables with a total of 28 items which include 5 points of Performance Expectancy statement *,* 4 items of Effort Expectancy statement *,* 4 items of Social Influence statement*,* 6 items of Facilitating Conditions statement*,* 5 items of Behavioral Intention statement, 4 items of Use Behavior statement. Details of the questionnaire statement can be seen in Table 1.

Table 1 Details of Question on Questionnaire

Performance Expectancy
1. With E-learning I will achieve better learning goals
2. With *E-learning* can improve the efficiency of my learning
3. With *E-learning it* can be useful for my learning activities
4. With *E-learning* can improve my competence
5. With *E-learning* can improve my academic achievement

Effort Expectancy
1. *E-learning is* easy to use
2. *E-learning is* easy for me
3. *E-learning* easily facilitates learning
4. Use of *E-learning is* easy to understand

Social Influence
1. People who are important to me think I have to use *E-learning*
2. My lecturer has helped me to use *E-learning*.
3. I use *E-learning* because people around me use it.
4. Not using *E-learning* will miss other people

Facilitating Condition
1. I have the resources needed to use *E-learning.*
2. I have the knowledge needed to use *E-learningE-learning*
3. Allcontents *are* easy to understand
4. All facilities available in *E-learning are* easy to use
5. Internet access is available at work
6. Internet access is available at home

Behavioral Intention
1. I intend to use *E-learning* so on
2. I will use *E-learning* in my learning
3. *E-learning* will be used for academic related purposes
4. *E-learning* will be used to improve my competency
5. *E-learning* will be used continuously in each lesson

Use Behavior
1. Using *E-learning* is a good idea
2. Learning is more interesting by using *E-learning*
3. I am willing to use *E-learning* during my studies.
4. I have no problem providing resources in the form of funds and time to use *E-learning*

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4.   RESULTS AND DISCUSSION

The population in this study consisted of 2561 active students, who majored in Informatics, Information Systems, and Information Management. Total of 346 questionnaires can be analyzed using AMOS. Based on the data collected. Based on data from questionnaires that have been received, the following are the results of the presentation of the characteristics of respondents based on Department, Force, Gender, Experience, voluntariness.

Table 2 Demographics of students surveyed

Department		
Informatics Enginering (TI)	173	46%
Information Systems (SI)	159	50%
Management Information (MI)	14	14,4%
Class of		
2014	82	24%
2015	80	23%
2016	88	25%
2017	96	28%

Gender		
Male	241	70%
Female	105	30%
Experience		
1-2 Semester	95	28%
3-4 Semester	91	26%

More than 5 semesters	160	46%
Voluntariness		
Not voluntary	57	16
Volunteer	289	84

The results of the analysis of the size of the measurement test for the suitability of the whole model can be seen in Table 3 [15]

Table 3 Test Of Suitability Of The Overall Model Or Overall Model Fit

Goodness of Fit	Criteria	Value	Description
Absolute Fit Measures			
Chi-Square (χ^2) / CMIN	Smaller, The Better (p ≥ 0.05)	979,077 (p=0,000)	Poor
CMIN/DF	CMIN/DF < 2 (fit) / CMIN/DF < 5 (reasonable)	2,94	*Reasonable*
Goodness of Fit Index (GFI)	GFI ≥ 0.90 (good fit) / 0.80 ≤ GFI ≤ 0.90 (marginal fit)	0,840	*Marginal Fit*
Root Mean Square Error of Approximation (RMSEA)	RMSEA ≤ 0.05 (close fit) / 0.05 ≤ RMSEA ≤ 0.08 (good fit)	0,750	*Good fit*
Incremental Fit Measures			
Adjusted Goodness of Fit Index (AGFI)	AGFI ≥ 0.90 (good fit) / 0.80 ≤ AGFI ≤ 0.90 (marginal fit)	0,805	*Marginal Fit*
Tucker-Lewis Index (TLI)	TLI ≥ 0.90 (good fit) / 0.80 ≤ TLI ≤ 0.90 (marginal fit)	0,893	*Marginal Fit*
Normed Fit Index (NFI)	NFI ≥ 0.90 (good fit) / 0.80 ≤ NFI ≤ 0.90 (marginal fit)	0,864	*Marginal Fit*
Parsimonious Fit Measures			
Parsimonious Normal Fit Index (PNFI)	Higher, The Better	0,761	Good
Parsimonious Goodness of Fit Index (PGFI)	Higher, The Better	0,689	Good

According to Table 3, the compatibility test of the overall model or *overall model fit is* known that the *chi-square* value is 979,077 and the probability value is 0,000. This shows that the model is not *fit* when viewed from the *chi-square value.* But you need to know that the *chi-square value is* very sensitive to the number of samples. The sample used for 346 is of considerable value, so it is necessary to look for other fit model sizes, such as GFI, AGFI, RMSEA [15].

After the overall suitability of the model is good, then the next *measurement model is made*. This test is done by measuring validity and reliability for each construct. A construct is said to be valid if the value is *standardized loading factor* ≥ 0.50 and ideally it should be ≥ 0.70. Constructs have good reliability if the value of *construct reliability* (CR) 70 0.70 and the value of *average variance extracted* (AVE) ≥ 0.50[15]. The *standardized loading factor* and the validity test results for each construct include:

Tabel 1 Validity and Reliability Testing

Variable	Indicator	Standardized Loading Factor	Description	Variable	Indicator	Standardized Loading Factor	Description	Variable	Indicator	Standardized Loading Factor	Description
EK	EK1	0,85	Valid	PS	PS1	0,78	Valid	NB	NB1	0,74	Valid
	EK2	0,75	Valid		PS2	0,77	Valid		NB2	0,85	Valid
	EK3	0,82	Valid		PS3	0,64	Valid		NB3	0,81	Valid
	EK4	0,78	Valid		PS4	0,7	Valid		NB4	0,8	Valid
	EK5	0,7	Valid	KF	KF1	0,63	Valid		NB5	0,79	Valid

	EU1	0,8	Valid		KF2	0,63	Valid		PP1	0,88	Valid
	EU2	0,81	Valid		KF3	0,83	Valid		PP2	0,82	Valid
EU	EU3	0,82	Valid		KF4	0,84	Valid	PP	PP3	0,81	Valid
	EU4	0,77	Valid		KF5	0,6	Valid		PP4	0,63	Valid
					KF6	0,65	Valid				

Based on the validity test in Table 4, it can be seen 23 indicators has standardized loading factor value equal to or greater than 0.70 and 5 indicators have standardized loading factor value is greater than 0.50. So, it can be concluded that overall the validity of the indicators in the construct is valid. Reliability test results measured using the values *construct reliability* (CR) and *average variance extracted* (AVE) can be seen in Table 4.5.

Table 5 Test Results Reliability

CONSTRUCT	CR	AVE	Description
EK	0,93	0,61	Reliable
EU	0,93	0,64	Reliable
PS	0,88	0,52	Reliable
KF	0,91	0,50	Reliable
NB	0,94	0,64	Reliable
PP	0,92	0,62	Reliable

Based on Table 5, the calculation results show that all constructs have a *construct reliability* (CR) value greater than 0.70 and the value of *Average Variance Extracted* (AVE) is greater than 0.50. Thus, it can be concluded that each construct is reliable and meets the requirements to enter the next measurement stage.

Next, testing the suitability of the structural model (*structural model*) involves the significance of the coefficient. AMOS output gives the results of estimated coefficients, *standard errors,* and the value of the *critical ratio* (CR) for each coefficient. A relationship will be called significant at the 95% confidence level if the value of the *critical ratio* (CR) ≥ 1.96 or the value *probability* (p) ≤ 0.05. Thus, it can be concluded that the hypothesis is accepted if the value of CR ≥ 1.96 or p value ≤ 0.05, and vice versa the hypothesis is rejected if the value of CR <1.96 or the value of p> 0.05.

Table 6 shows the results of testing hypotheses that are processed from AMOS Outputs.

Table 6 Hypothesis Test Results

Hypothesis	Relationship	Estimate	S.E.	C.R.	P	Hasil
H1	NB <--- EK	0,3405	0,063	5,4086	***	Accepted
H2	NB <--- EU	0,3713	0,0671	5,5313	***	Accepted
H3	NB <--- PS	0,2003	0,0686	2,9203	0,0035	Accepted
H4	PP <--- KF	0,1731	0,0731	2,3685	0,0179	Accepted
H5	PP <--- NB	0,8938	0,0739	12,0875	***	Accepted

Description:
***   = Probability value smaller than 0.001
EK   = Performance Expectancy
EU   = Effort Expectancy
PS   = Social Influence
KF   = Facilitating Conditions

NB   = Behavioral Intention
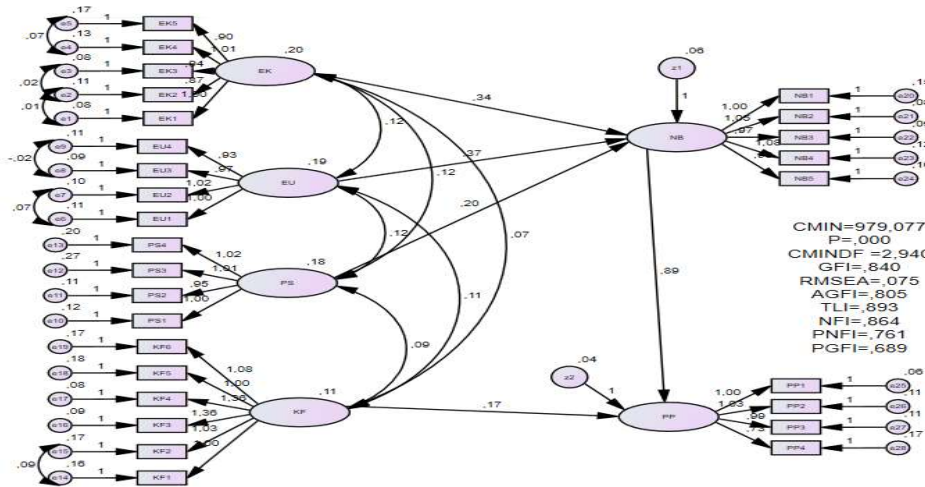PP   = Use Behavior

Figure 4 Hypothesis Test Results

Furthermore, Testing the SEM moderating model can also be analyzed using a multi group analysis approach to test the compatibility of the structural model (structural model) which involves the significance of the coefficients. AMOS output gives the results of estimated coefficients, standard errors, and the value of the critical ratio (CR) for each coefficient. A relationship will be called significant at the 95% confidence level if the value of the critical ratio (CR) ≥ 1.96 or the probability value (p) ≤ 0.05. If it is different then there is a significant moderating influence in the model [15]

In this study there are 3 moderating variables namely Gender Variables, Experience Variables, Voluntariness Variables. Table 7 Shows the Results of Model Regression Analysis with Moderation of Gender processed from AMOS Outputs.

Table 7 Results of Model Regression Analysis with Gender Moderation

Relationship	Gender	Estimate	S.E.	C.R.	P	Result
NB <--- EK	Male	0,3725	0,0803	4,6368	***	Significant
	Female	0,3056	0,103	2,966	0,003	Significant
NB <--- EU	Male	0,3867	0,0747	5,1795	***	Significant
	Female	0,3118	0,1433	2,1761	0,0295	Significant
NB <--- PS	Male	0,1484	0,0699	2,1245	0,0336	Significant
	Female	0,4127	0,2131	1,9373	0,0527	Not significant
PP <--- KF	Male	0,2234	0,0819	2,7267	0,0064	Significant
	Female	-0,0443	0,1622	-0,2729	0,785	Not significant

Conclusions from the testing of the Regression Analysis Model with Gender Moderation can be seen in Table 8.

Table 8 Results of Model Regression Analysis with Moderation of Gender

HYPOTHESES	DESCRIPTION
H6: Gender has a moderating effect that affects Performance Expectation factors (EK) on Intention to Behavior (NB)	REFUSED
H7: Gender has a moderating effect that influences the factor of Effort Expectancy(EU) on Intimate Intention (NB).	REFUSED
H8: Gender has a moderating effect that influences the Social Influence (PS) factor on Intention to Behavior (NB).	ACCEPTABLE

Table 9 shows the results of model regression analysis with experience moderation which is processed from AMOS output.

Table 9 Results of Regression Analysis Model with Moderation Experience

Relationship	Experience	Estimate	S.E.	C.R.	P	Result
NB <--- EK	1-2 Semesters	0,2519	0,1161	2,1694	0,0301	Significant
	3-4 Semesters	0,2859	0,1262	2,2646	0,0235	Significant
	More than 5 semesters	0,3745	0,0959	3,9054	***	Significant
NB <--- EU	1-2 Semesters	0,6515	0,2306	2,8248	0,0047	Significant
	3-4 Semesters	0,6067	0,1434	4,2294	***	Significant
	More than 5 semesters	0,2375	0,0844	2,8159	0,0049	Significant
NB <--- PS	1-2 Semesters	0,0439	0,1514	0,2899	0,7719	Not significant
	3-4 Semesters	0,0712	0,118	0,603	0,5465	Not significant
	More than 5 semesters	0,326	0,112	2,9102	0,0036	Significant
PP <--- KF	1-2 Semesters	-0,0593	0,15	-0,3958	0,6923	Not significant
	3-4 Semesters	0,1557	0,1534	1,0149	0,3102	Not significant
	More than 5 semesters	0,269	0,112	2,4024	0,0163	Significant

The conclusion of the test results of Model Regression Analysis with Moderation Experience can be seen in table 10.

Table 10 Results of Model Regression Analysis with Experience Moderation

HYPOTHESES	DESCRIPTION
H9: Experience has a moderating effect that influences the Effort Expectation (EU) factor on Behavioral Intention (NB).	REFUSED
H10: Experience having a moderating effect that affects the Social Influence (PS) factor has a positive effect on Behavioral Intention (NB).	ACCEPTED
H11: Experience has a moderating effect that affects the Facilitating Condition (KF) factor for Use Behavior (PP).	ACCEPTED

Table 11 Shows the Results of Model Regression Analysis with Moderation of voluntariness processed from AMOS Output.

Table 11 Results of Model Regression Analysis with Moderation of voluntariness

Relationship	Voluntariness	Estimate	S.E.	C.R.	P	Result
NB <--- EK	Not voluntary	0,3886	0,1799	2,1603	0,0308	Significant
	Volunteer	0,345	0,0681	5,0651	***	Significant
NB <--- EU	Not voluntary	0,2439	0,1573	1,5511	0,1209	Not significant
	Volunteer	0,3971	0,0755	5,2584	***	Significant

NB <--- PS	Not voluntary	0,1998	0,1358	1,4713	0,1412	Not significant
	Volunteer	0,2004	0,0809	2,4784	0,0132	Significant
PP <--- KF	Not voluntary	0,5492	0,1992	2,7564	0,0058	Significant
	Volunteer	0,1167	0,0773	1,51	0,131	Not significant

Conclusions from the testing of Model Regression Analysis with Moderation of voluntariness can be seen in Table 12.

Table 12 Results of Model Regression Analysis with Moderation of voluntariness

HYPOTHESES	DESCRIPTION
H12 : voluntariness has a moderating effect that influences the Social Influence (PS) factor on Behavioral Intentions (NB)	ACCEPTED

5.   CONCLUSIONS

The use of technology has become one of the factors needed by universities to be able to compete and survive. Electronic learning (e-learning) is the use of Internet and digital technologies to create experience in educating others. E-Learning is used in lectures at STMIK Mikroskil to help students and lecturers in the teaching and learning process. This study uses the UTAUT (Unified Theory of Acceptance and Use of Technology) model. The aim is to analyze the tendency of users of e-learning systems at STMIK Mikroskil Medan, by testing whether Behavioral Intention and behavior to use a technology are influenced by Performance Expectancy, Effort Expectancy, Social Influence, and Facilitating Conditions. These four factors are moderated by gender, experience, and risk factors.

Questionnaire data were collected from 346 active students and analyzed by structural equation modeling (SEM) using AMOS 24. The results of this study showed Performance Expectation Factors, Effort ExpectancyFactors, Social Influence Factors had a positive effect on Behavioral Intention, Facilitating Conditions Factors positively influenced Use Behavior, Behavioral Intention has a significant influence on Use Behavior. Gender does not have a moderating effect that affects the factors of Performance Expectation and Effort Expectancyon Behavioral Intention, but Gender has a moderating effect that affects Social Influence factors towards Behavioral Intention. Experience does not have a moderating effect that influences Business Expectancy factors on Behavioral Intention. However, experience has a moderating effect that influences Social Influence factors that have a positive effect on Behavioral Intention. Experience also has a moderating effect that affects the Facilitating Conditions factor for Use Behavior. Voluntariness has a moderating effect that affects Social Influence factors towards Behavioral Intention.

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