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WHAT FACTORS INFLUENCE THE USE OF BELAJAR.USD LEARNING MANAGEMENT SYSTEMS? AN ANALYSIS OF TAM 3 BASED ON LECTURER'S VIEW

Ignatius Aryono Putranto
Ramon V.del Rosario – College of Business, De La Salle University, Manila, Philippines
Email: putrantoaryono@gmail.com

ABSTRACT

The aim of this research is to explore the factors influenced the use of 'belajar.usd' Learning Management Systems (LMS) from the lecturer's view according to Technology Acceptance Model 3 (TAM 3). This research is a quantitative research. The data in this research were collected using questionnaire to explore the perception of the respondents.

This research use purposive sampling method. The respondents of this research were 42 lecturers in Economic Faculty, Sanata Dharma University, Yogyakarta, Indonesia. The collected data then was analyzed using Partial Least Square – Structural Equation Modeling (PLS-SEM) technique.

The conclusion of this study is the behavioral intention on using the belajar.usd Learning Management System did not affect the actual use. More detailed, the determinant of behavioral intention on using LMS is perceived ease of use. Meanwhile, both Perceived Ease of Use and Perceived Usefulness were not the determinants of the intention to use belajar.usd LMS. Perceived Ease of Use itself was determined by the Computer Anxiety, Perception of External Control, and Objective Usability.

Keywords*: Intention, Learning Management Systems, Perceived Ease of Use, Perceived Usefulness, Technology Acceptance Model*

1. Introduction

In the middle of year 2020, the entire world was shocked by the spread of Covid-19 pandemic. This pandemic change every aspects of humans' life due to the dangerous effect of this disease to humans. The affected aspect of human's life also including education aspect. The education systems moved to the online mode because as mentioned by Bhagat & Kim, (2020), the pandemic brings some of consequences including the students who cannot attend to the school physically. The changes from in person to online mode also affect the aspect of time and supply by parents allocated to their children on online learning. As found by Bansak & Starr (2021), during the covid-19 pandemic, parent will spend more time especially when they have more children meanwhile, the worked mother will spent less time due to their limited available time for their children. This result was also supported by Varea et al., (2022) that the pandemic has resulted in new protocols that have altered the methods teachers use to instruct and interact with students and their families.

With the shifting from in person to online mode, the use of Learning Management Systems (LMS) increased. According to Ma et al., (2024), Learning Management System is defined as "a software application or web-based technology considered to implement, assess a specific learning procedure, and plan to develop new techniques". Fındık-Coşkunçay et al., (2018) also added that a Learning Management System (LMS) is a commonly utilized tool in higher education institutions for facilitating course activities in an online mode. Learning Management Systems also provide offers a secure, reliable, and adaptable platform for online education (Kraleva et al., 2019).

The increasing use of Learning Management Systems leads to the user acceptance of this technology. Some of current studies focuses on the acceptance of Learning Management System. For example, Camilleri & Camilleri (2022) explore the acceptance of LMS use for higher education students in Southern European. The acceptance of LMS also studied by Ashraf et al., (2020). They studied the continuance intention on using LMS for university students in Iran based on Expectation Confirmation Model, Technology Acceptance Model and some of external variables. Waris & Hameed (2023) also conducted a study related to the acceptance of the use of LMS from the faculty members of Pakistani universities. They use extended Technology Acceptance Model as their research model. Based on the previous literatures, this paper will use Technology Acceptance Model 3 (TAM 3) developed by Venkatesh & Bala (2008) because there is a lack of study of Learning Management Systems acceptance from the lecturer's view using Technology Acceptance Model 3.

Based on the phenomena and previous studies above, the research problem of this paper is about the acceptance factors of TAM 3 on using Learning Management Systems (LMS) from the lecturers' view. The research question of this paper is: what are the determinant factors of user acceptance based on TAM 3 on using LMS from the perspective of lecturer in Economic Faculty, Sanata Dharma University Yogyakarta? Based on the research question, this research's aim is to analyze the determinant factors of user acceptance based on TAM 3 on using LMS from the perspective of lecturer in Economic Faculty, Sanata Dharma University Yogyakarta. The scope and limitations of this research is limited to the lecturers in Economic Faculty, Sanata Dharma University Yogyakarta who are in charge of teaching and not currently undergoing further studies. The lecturers who are in charge of teaching, used belajar.usd Learning Management Systems in their classes during the Covid-19 pandemic. Other limitations is related with the TAM 3 used in this research. This research exclude the experience construct because this is a preliminary research of the acceptance of LMS usage.

2. Literature Review

2.1. Learning Management Systems

Learning Management Systems (LMS) became widely-used to facilitate the online learning, The use of LMS is increasing when the world is faced with the Covid-19 pandemic. According to Tseng (2020), higher education institutions have embraced integrated computer systems known as learning management systems in order to construct fully online virtual universities or efficient e- learning environments. Meanwhile, according to Nguyen (2021), a learning management system (LMS) is a software program or website that facilitates the delivery of courses, knowledge acquisition, and learning control. Learning Management Systems offers various support for the e- learning mode. According to Cheng & Yuen (2018), LMS gives support as a means to create and deliver the learning material, monitoring students' activities, as a means to assess the performance of the students. Not only for teachers or lecturers, LMS also provides support for the students. As mentioned by Cheng & Yuen (2018), LMS provides support for students in terms of interaction with their classmates and also with their teachers or lecturers using the discussions and video conference features.

Sanata Dharma University, one of the private university in Yogyakarta, Indonesia also provide the Learning Management Systems to engage in online learning. The LMS of Sanata Dharma University is called *belajar.usd.ac.id.* The *belajar.usd.ac.id* LMS was equipped with so many supportive features to support online learning such as: discussion panel, assignment submission panel, attendance record panel, place to uploading the learning materials, and so on.

2.2. Technology Acceptance Model

Technology Acceptance Model (TAM) is one of the most well-known model to examine the acceptance factors of use of the technology. This model was firstly developed by Davis (1989). Based on his study, Davis (1989) proposed two determinant factors of user acceptance:

perceived usefulness and perceived ease of use. Davis (1989) defines both perceived usefulness and perceived ease of use as: "the degree to which a person believes that using a particular system would enhance his or her job performance" and "the degree to which a person believes that using a particular systems would be free of effort", respectively. Technology Acceptance Model was inspired from Theory of Reasoned Action (TRA) developed by Fishbein & Ajzen (1975). According to Davis et al., (1989), TAM uses TRA as the basis because TAM specifies the causal relationships between two fundamental beliefs—perceived utility and perceived ease of use—and users' attitudes, intentions, and actual computer adoption behavior.

Based on Theory of Reason Action and the initial work of TAM, Davis et al., (1989) developed the Technology Acceptance Model (TAM). Behavioral intention defined as a measurement of the strength of one's intention to perform specified behavior (Fishbein & Ajzen, 1975). The Technology Acceptance Model (TAM) then experienced some developments through Technology Acceptance Model 2 (TAM2) developed by Venkatesh & Davis (2000) and also Technology Acceptance Model 3 (TAM3) developed by Venkatesh & Bala (2008). Technology Acceptance Model 2 emphasize on the identification of the determinants of perceived usefulness construct. Based on their proposed works, Venkatesh & Davis (2000) identify the determinants of perceived usefulness into: subjective norm, image, job relevance, output quality, result demonstrability, and also add the two moderating variables: experience and voluntariness. Technology Acceptance Model 3 (TAM3) extend Technology Acceptance Model 2 (TAM2) by identify the determinants of the perceived ease of use. Venkatesh & Bala (2008) identify the determinants of perceived ease of use are: computer self-efficacy, perception of external control, computer anxiety, computer playfulness, perceived enjoyment, and objective usability.

2.3. Research Framework

Figure 1 below shows the framework of this research that was inspired from Technology Acceptance Model 3.

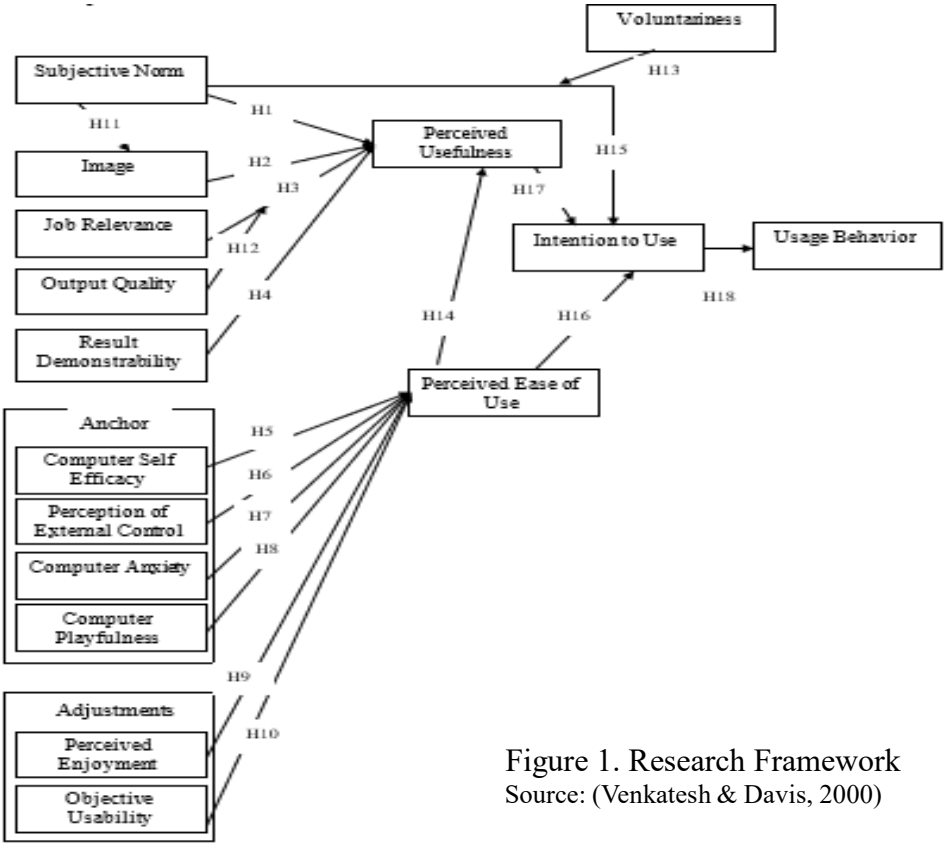

Figure 1. Research Framework
Source: (Venkatesh & Davis, 2000)

2.4. Hypothesis Development

- H1: Subjective Norm influence Perceived Usefulness on using *Belajar.usd* Learning Management System.
- H2: Image influence Perceived Usefulness on using *Belajar.usd* Learning Management System.
- H3: Job Relevance influence Perceived Usefulness on using *Belajar.usd* Learning Management System.
- H4: Result Demonstrability influence Perceived Usefulness on using *Belajar.usd* Learning Management System.
- H5: Computer Self-Efficacy influence Perceived Ease of Use on using *Belajar.usd* Learning Management System.
- H6: Perceptions of External Control influence Perceived Ease of Use on using *Belajar.usd* Learning Management System.
- H7: Computer Anxiety influence Perceived Ease of Use on using *Belajar.usd* Learning Management System.
- H8: Computer Playfulness influence Perceived Ease of Use on using *Belajar.usd* Learning Management System.
- H9: Perceived Enjoyment influence Perceived Ease of Use on using *Belajar.usd* Learning Management System.
- H10: Objective Usability influence Perceived Ease of Use on using *Belajar.usd* Learning Management System.
- H11: Subejctive Norms influence Image on using *Belajar.usd* Learning Management System.
- H12: Output Quality enhances the effects of Job Relevance towards Perceived Usefulness on using *Belajar.usd* Learning Management System.
- H13: Voluntariness enhances the effects of Subjective Norms towards Behavioral Intention on using *Belajar.usd* Learning Management System.
- H14: Perceived Ease of Use influence Perceived Usefulness on using *Belajar.usd* Learning Management System.
- H15: Subjective Norms influence Behavioral Intention on using *Belajar.usd* Learning Management System.
- H16: Perceived Ease of Use influence Behavioral Intention on using *Belajar.usd* Learning Management System.
- H17: Perceived Usefulness influence Behavioral Intention on using *Belajar.usd* Learning Management System.
- H18: Behavioral Intention influence Actual Use on using *Belajar.usd* Learning Management System.

3. Research Methods

This research is quantitative empirical research. The population of this research is all of lecturers in Economic Faculty, Sanata Dharma Univeristy, Yogyakarta who are in charge of lecturing and currently not undergoing further studies. The amount of sample in this research is 42 respondents out of 43 of populations. The sampling method used in this research were purposive sampling method. The data collection procedure in this research is using 5-Likert scale questionnaire with the main reference of questionnaire is from Venkatesh & Bala (2008) with some adjustments. Guttman scale also deployed in this research for Computer Self Efficacy construct. The data collection method also include the open-ended question in order to know the suggestions from the respondents towards the each constructs in the framework.

4. Research Findings and Discussion

4.1. Descriptive Statistics

Descriptive statistics analysis was conducted using SPSS statistics software. Table 1 below shows the descriptive statistics result of the respondents in this study. From the table 1 below, the most respondents on this study were the Economic department lecturer who were 55 years old. The youngest respondents in this study where the lecturer who were in 31 years

old, and the oldest is 75 years old. In the context of gender, most respondent in this study were the respondent with the value label 1 which represented male respondents. With regards to the department of the lecturer, the highest number of respondents are from bachelor of management department with the mode of 2.

Table 1. Descriptive Statistics

Statistics					
		Age	Gender	Department	Education
N	Valid	42	42	42	42
	Missing	0	0	0	0
Mean		49,43	1,48	1,95	2,29
Std. Error of Mean		1,847	,078	,152	,071
Median		52,00	1,00	2,00	2,00
Mode		55	1	2	2
Std. Deviation		11,972	,505	,987	,457
Variance		143,324	,256	,973	,209
Skewness		-,101	,099	,899	,984
Std. Error of Skewness		,365	,365	,365	,365
Kurtosis		-1,011	-2,092	-,077	-1,085
Std. Error of Kurtosis		,717	,717	,717	,717
Range		44	1	3	1
Minimum		31	1	1	2
Maximum		75	2	4	3
Sum		2076	62	82	96
Percentiles	25	36,75	1,00	1,00	2,00
	50	52,00	1,00	2,00	2,00
	75	57,00	2,00	2,00	3,00

Source: SPSS output

4.2. Hypothesis Testing

To conduct the hypothesis testing, Partial Least Square-Structural Equation Modeling (PLS-SEM) was deployed in this study. There are some steps for conducting the PLS-SEM technique. The first step is evaluation of measurement model – this step consists of: 1) assessment of the indicator reliability; 2) assessment of the internal consistency reliability; 3) assessment of convergent validity; and 4) assessment of the discriminant validity. The second step is evaluation of structural model.

4.3. Evaluation of Measurement Model

4.3.1. Assessment of the Indicator Reliability

According to Hair et al., (2017), indicator reliability is determined by the outer loadings with the common rule of standardized of outer loading is 0.708 or higher. There are some indicators that were not reliable: CANX1 (Computer Anxiety 1), CPLAY 4 (Computer Playfulness 4), CSE 1 and CSE 2 (Computer Self-Efficacy 1 and 2), PEC 4 (Perceived External Control 4), RES 4 (Result Demonstrability 4), SN 1 to SN 3 (Subjective Norm 1 to Subjective Norm 3), VOL 2 and VOL 3 (Voluntariness 2 and Voluntariness 3). The unreliable indicators were removed. After doing the removal of the unreliable indicators, all of the current indicators are reliable with the outer loadings are higher than 0.708.

4.3.2. Internal Consistency Reliability Assessment

Internal consistency reliability consists of composite reliability and Cronbach's Alpha. According to Hair et al., (2017), both Cronbach's Alpha or Composite Reliability (both were interpreted in the similar way), are acceptable for score is in between 0.60 to 0.70 for exploratory study. In other hand, the score in between 0.70 to 0.90 is satisfy for other advanced stage of study. The internal consistency reliability assessment for this study shows that based on the Cronbach's Alpha score and Composite reliability (rho_a), most of the constructs used in this study were reliable with the score is above 0.70, and there were two constructs which have score below 0.70: CPLAY (Computer Playfulness) and CSE (Computer Self-Efficacy). Meanwhile, based on the Composite Reliability (rho_c), all of the constructs in this study are reliable.

Table 2. Internal Consistency Reliability Assessment Result

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)
CANX	0.895	0.943	0.933
CPLAY	0.628	0.632	0.801
CSE	0.687	0.690	0.864
IMG	0.932	1.035	0.956
INT	0.842	0.867	0.905
JOB	0.890	0.915	0.932
OUT	0.855	0.915	0.908
PE	0.941	0.948	0.962
PEC	0.898	0.909	0.936
PEOU	0.871	0.871	0.912
PU	0.929	0.930	0.950
RES	0.906	0.909	0.941
USE	1.000	1.000	1.000
SN	1.000	1.000	1.000
VOL	1.000	1.000	1.000

Source: SmartPLS 3 output

4.3.3. Convergent Validity Assessment

Convergent validity assessment uses Average Variance Extracted (AVE) as the validity criteria. According to Hair et al., (2017), the acceptable AVE score is higher than 0.50. Based on table 2 below, all of the constructs in this study were meet with the convergent validity requirement because all of the AVE score of each constructs are above 0.50.

Table 3. Convergent Validity Assessment Result

	Average variance extracted (AVE)
CANX	0.823
CPLAY	0.573
CSE	0.761
IMG	0.879
INT	0.761
JOB	0.820
OUT	0.767
PE	0.894
PEC	0.831
PEOU	0.723
PU	0.825
RES	0.842
USE	1.000
SN	1.000
VOL	1.000

Source: SmartPLS 3 output

4.3.4. Discriminant Validity Assesssment

The next criteria related to the discriminant validity is Heterotrait-Monotrait Ratio (HTMT). As mentioned by (Hair et al., 2017), HTMT is the ratio of the between-trait correlations to the within trait correlations. All of the constructs in this research were met with the HTMT ratio.

4.3.5. R-Square

R-square indicates how much dependent variable can be explained by its independent variables. Based on table 3 below, the R-square of the actual use is 0.024 or 2.4%.

Table 4. R Square

	R-square	R-square adjusted
USE	0.024	-0.001
IMG	0.029	0.004
INT	0.535	0.484
PEOU	0.827	0.797
PU	0.763	0.714

Source: SmartPLS 3 output

4.4. Evaluation of Structural Model

4.4.1. The Assessment of the Significance and the Relevance of the Structural Model Relationships

With regards to the hypothesis testing, total effects analysis was conducted in this study. Table 4 shows the total effects (direct effects and moderating effects) associated with the hypothesis relevant to this study. Hypothesis 1, related to the effect of Subjective Norm to Perceived Usefulness on using the LMS, the hypothesis was not supported with P-values of 0.091 (greater than alpha 0.05) with T-statistics value of 1.694. This result was similar with the study of Ismail et al., (2019) where there was no significant effect of Subjective Norm to Perceived Usefulness on the use of student information systems. Meanwhile, this finding was different with the findings of other studies. As mentioned by Lavidas et al., (2023), there was a positive effect from subjective norm to perceived usefulness from the faculty members' perspective in Greece on using Moodle Learning Management Systems. Our findings also different with Davoodi et al., (2020). Based on their study, they found that there was an effect of subjective norms to perceived usefulness from high school English teachers' perspective on using the technology in education. Sorkun et al., (2022) also found the positive effect of Subjective Norms to Perceived Usefulness in using e-learning program. Similar with other previous research, Al-Gahtani (2016) found that there is a significant effect of Subjective Norm to Perceived Usefulness in the accceptance of e-learning. Based on our findings, the non-significant effect of Subjective Norm to Perceived Usefulness may indicated that among the Economic lecturers, they will not be affected by their peers' suggestion to get the usefulness on using 'belajar.usd' Learning Management Systems.

The second hypothesis (H2), related to the effect of Image to Perceived Usefulness, also not supported. This finding was supported by previous research. Calisir et al., (2014) confirm that based on their research, there is no significant effect of Image to Perceived Usefulness in the context of web-based learning. Meanwhile, the study from Sorkun et al., (2022) founds that there was a positive effect from Image to Perceived Usefulness in e-learning program use. With our finding that there is no significant effect of image to perceived usefulness, it is indicates that among the respondents, they feel that image or social status on using LMS is not as important as other factors.

Table 5. Total Effects

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P-values	Hypothesis Supported
H1: SN → PU	0.221	0.234	0.130	1.694	0.091	No
H2: IMG → PU	0.046	0.036	0.064	0.716	0.474	No
H3: JOB → PU	0.552	0.564	0.160	3.456	0.001	Yes
H4: RES → PU	0.069	0.041	0.135	0.514	0.607	No
H5: CSE → PEOU	-0.049	-0.054	0.085	0.572	0.568	No
H6: PEC → PEOU	0.578	0.582	0.120	4.802	0.000	Yes
H7: CANX → PEOU	0.317	0.287	0.103	3.066	0.002	Yes
H8: CPLAY → PEOU	0.166	0.183	0.173	0.960	0.338	No
H9: PE → PEOU	0.066	0.054	0.154	0.431	0.667	No
H10: OU → PEOU	-0.203	-0.177	0.080	2.535	0.012	Yes
H11: SN → IMG	-0.143	-0.145	0.098	1.470	0.142	No
H12: Moderating effect OU to JOB → PU	-0.033	-0.031	0.149	0.219	0.827	No
H13: Moderating effect VOL to SN → INT	-0.185	-0.155	0.549	0.338	0.736	No
H14: PEOU → PU	0.172	0.182	0.120	1.434	0.152	No
H15: SN → INT	0.445	0.412	0.399	1.116	0.265	No
H16: PEOU → INT	0.389	0.402	0.135	2.893	0.004	Yes
H17: PU → INT	0.263	0.256	0.204	1.286	0.199	No
H18: INT → USE	0.152	0.148	0.155	0.980	0.327	No

Source: SmartPLS 3 output

Third hypothesis (H3), the effect of Job Relevance to Perceived Usefulness is fully supported with p-value of 0.001 (lower than alpha 0.005) and T-statistic of 3.456. This result was inline with other studies. Saroia & Gao, (2019), for example, found that there was a positive effect of Academic Relevance to Perceived Usefulness in using mobile learning management systems in Sweden. Saroia & Gao, (2019) also explain that academic relevance construct in their study was based on Job Relevance construct as proposed by Venkatesh & Davis (2000) in Technology Acceptance Model 2 (TAM2). The similar result with this study also confirmed by previous study from Almulla (2024). Based on his study to undergraduate and graduate students in King Faisal University, there was a positive effect of job relevance to perceived usefulness in mobile learning management systems use. Similar to this study and other previous studies, Al-Gahtani (2016) also identify the influence of job relevance to perceived usefulness in the context of the acceptance of e-learning.

The effect of Result Demonstrability to Perceived Usefulness in the use of learning management system as stated in fourth hypothesis (H4) was not supported. The p-value of this hypothesis was 0.607 (higher than alpha 0.05). This finding is similar with the research of Al-Gahtani (2016) where there was no significant effect of result demonstrability to perceived usefulness in the acceptance of e-learning. Our result was different with other previous studies. Ismail et al., (2019) found that result demonstrability was a determinant for perceived usefulness in the use of students information systems. Bui et al., (2022) also found that there is a positive effect of result demonstrability to perceived usefulness in the adoption of online LMS from lecturers' perspective in Vietnam. Based on our finding, the not significant influence of the result demonstrability to perceived usefulness on using *belajar.usd* learning management systems might indicate that the lecturers might not think that LMS can produce the measurable output. The fifth hypothesis (H5), related to the influence of Computer Self-Efficacy to Perceived Ease of Use was rejected. This result was different with the finding from that there was a significant effect of Computer Self-Efficacy to Perceived Ease of Use in the context of e-learning adoption. Xie et al., (2022) also found the positive effect of computer self efficacy to perceived ease of use in the acceptance of virtual training systems. Based on our finding that computer self-efficacy did not influence perceived ease of use on using the LMS by the lecturers, this result might indicate that the ability and the confidence of the lecturers on using LMS did not affect to the use of the LMS although the use of the LMS itself is free from efforts.

Other determinant of Perceived Ease of Use, that is perceptions of external control was supported in hypothesis six (H6). The p-values of this hypothesis is lower than alpha 0.05 (0.000). Based on this study, there was an effect of Perceptions of External Control to Perceived Ease of Use on using *belajar.usd* learning management systems from the perspective of Economic department lecturers. This finding is in line with the findings from other previous studies. Al-Gahtani (2016) found the significant influence of perceptions of external control to perceived ease of use for e-learning acceptance. Similar result also obtained by Unal & Uzun (2021). Based on their study, there is a positive effect of perceptions of external control to perceived ease of use among the university students on using Edmodo, one of the famous education social network site.

Seventh hypothesis (H7), the effect of Computer Anxiety to Perceived Ease of Use in using *belajar.usd* Learning Management System was supported with p-value 0.002. This findings indicate that from the perspective of Economic department lecturers, the intensity of their anxiety on using computers, will influence the easy of use on using *belajar.usd* Learning Management Systems. This findings also confirms the results from other studies in the context of e-learning and LMS acceptance. Al-Gahtani (2016) founds the positive effect of computer anxiety to perceived ease of use on the acceptance of e-learning. Sayaf et al., (2021) also found the positive and significant impact of computer anxiety to perceived ease of use on digital learning from the perspective of Saudi universities student.

Eighth hypothesis (H8), related to computer playfulness effect to the perceived ease of use, the hypothesis was not supported with p-value 0.338 (greater than 0.05 alpha). This finding was in line with the result from Al-Gahtani (2016). In his study, Al-Gahtani (2016) found that computer playfulness is not significant to be the determinant of perceived ease of

use in terms of e-learning adoption. In other studies related to the use of cloud computing technology by Tırpan & Bakırtaş (2020), there is also no significant effect from computer playfulness to perceived ease of use. These not significant findings indicates that the users (or the lecturers) of the technology (LMS) feels that the playfulness on using computers will not affect to the easy of use of the LMS.

Hypothesis nine (H9) related to the influence of Perceived Enjoyment to Perceived Ease of Use on using the LMS, the hypothesis is not supported. This finding was based on the p-value of 0.667 (higher than alpha 0.05). Perceived enjoyment was defined as "the extent to which the activity of using a specific system is perceived to be enjoyable in its own right, aside from any performance consequences resulting from system use" (Venkatesh, 2000). Based ont the definition and also based on our finding, there was an indication that according to the economic department lecturers, the easy of use on using *belajar.usd* LMS was not determined by their enjoyment on using it. The not significant effect of perceived enjoyment to perceived ease of use was in line with the other studies' result. Research from Tırpan & Bakırtaş (2020) also shows the not significant effect of perceived enjoyment to perceived ease of use on using the cloud computing technologies.

The last expected determinant of Perceived ease of Use, called Objective Usability was supported. According to our research, the p-value for hypothesis 10 (the effect of objective usability to perceived ease of use on using LMS) is 0.012 (lower than alpha 0.05). This finding was different with the result from Tao et al., (2020). Their research on the acceptance of health information portal shows that there is no significant effect from objective usability to perceived ease of use. Our finding indicate that in the use of *belajar.usd LMS*, the economic department lecturers feels that the use of the LMS will be easier determined by the objective factors of the features from the LMS itself.

The eleventh hypothesis (H11), the influence of subjective norm to image on using LMS was not supported. The p-value of this hypothesis is 0.142 (greater than alpha 0.05). This finding indicates that according to the Economic department lecturers, the social norm from peers did not affect their social image when they use *belajar.usd Learning Management Systems.* This finding was different with the findings of other studies. The research of Al-Gahtani (2016) found the positive effect from Subjective Norm to Image on the adoption of e-learning. Research from Saari et al., (2022) also found the significant effect of subjectivenorm to image on the acceptance of social robot adoption.

With regards to the moderating effects that were hypothesized in this study, both of the moderation effects were not significant so the hypothesis were not supported. Hypothesis 12 is about the moderation effect of output quality in the effect of job relevance to perceived usefulness in using *belajar.usd Learning Management Systems*. The p-value of this hypothesis is 0.827 (greater than 0.05 alpha). This result indicates that in the use of *belajar.usd Learning Management System,* the output quality of the LMS did not moderate the effect of job relevance to perceived usefulness in using the LMS. Our finding was different with the finding from Al-Gahtani (2016) that the output quality positively moderates the effect of job relevance to perceived usefulness in the use of e-learning. Meanwhile, the p-value of the second moderation effect is 0.736. Similar with previous moderating effect, this result also did not confirmed with the finding from Al-Gahtani (2016).

Hypothessis fourteen (H14) related to the two main factors of Technology Acceptance Model, was not supported. The p-value of this hypothesis is 0.152 (greater than 0.05 alpha). This finding indicates that when the users were using the LMS, they feel that the ease of use of the LMS did not affect the usefulness of the LMS. This finding was different with other previous studies. Research about online learning that conducted by Esteban-Millat et al., (2018) found that there is a positive effect of perceived ease of use to perceived usefulness in online learning acceptance. Similar with Esteban-Millat et al., (2018), the study from Al-Gahtani (2016) also found the positive effect of perceived ease of use to perceived usefulness in e-learning acceptance.

The next three hypothesis is related to the determinants of intention to use the *belajar.usd Learning Management Systems*: perceived ease of use, perceived usefulness, and subjective norm. Based on the data analysis, the only determinant of the behavioral intention

to use *belajar.usd Learning Management System* is only Perceived Ease of use with p-value 0.004. Meanwhile, subjective norm and perceived usefulness is not significant to the behavioral intention to use. The last hypothesis, related to the effect of behavioral intention to actual use of *belajar.usd* Learning Management System, unfortunately, the hypothesis was also not supported with p-value of 0.327.

5. Conclusion

The conclusion of this study is the behavioral intention on using the *belajar.usd Learning Management System* did not affect the actual use. More detailed, the determinant of behavioral intention on using LMS is perceived ease of use. Meanwhile, both Perceived Ease of Use and Perceived Usefulness were not the determinants of the intention to use *belajar.usd LMS.* Perceived Ease of Use itself was determined by the Computer Anxiety, Perception of External Control, and Objective Usability.

Related to the theoretical implications, this study implies that technology acceptance model still can be considered as the most valuable model to assess the use of technology. Meanwhile, for the practical implication, this study implies that learning management system still can be considered as tools in online learning. Some of the suggestions for future research are: the next research can consider to study for every department in University in order to get more respondents and to compare the results of acceptance of *belajar.usd LMS* across the departments.

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