Simon Petrus Wenehenubun

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THE INFLUENCE OF THE LECTURERS' PERCEIVED BEHAVIORAL CONTROL TOWARDS INTENTION TO USE ONLINE LEARNING SYSTEM DURING THE COVID-19 PANDEMIC

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ABSTRACT

This study aims to analyze the influence of lecturers' perceived behavioral control on the intention to use the online system in teaching and learning. The impact of Covid 19 requires every university to provide learning support facilities, including the Learning Management System (LMS). Lectures need to make use of LMS effectively in achieving learning objectives. Data were collected using a questionnaire with a google form. There were 162 lecturers from various private universities in Jabodetabek. For the data analysis, we used structural equation modeling (SEM) PLS 3.0. The results revealed that the lecturers felt confident in using the LMS provided by the university. Lecturers have behavioral beliefs, normative beliefs, and control beliefs in facilitating learning for students. They do believe that the LMS provided by the university is effective in the learning process and makes it easier for them to teach. However, there are still obstacles to operating the available LMS features. The practical implications derived from this research are that online learning can be applied in the post-COVID-19 era and can become an effective learning model in private universities with adequate LMS facilities. Further research should be conducted with a broader scope, a larger number of respondents, and specific details regarding lecturers' PBC based on their study programs.

Keywords: *Perceived behavioral control, intention to use online system, LMS, TAM, online learning*

1. PREFACE

Amid the COVID-19 pandemic, Indonesian private universities in the Jabodebatek area shifted to online learning, necessitating Learning Management Systems (LMS) adoption. Some faculty adapted readily, while others faced challenges tied to the perceived ease of use and usefulness of LMS, such as the extent to which the LMS makes work easier and improves individual performance (Kulviwat et al., 2014, Fathema et al., 2015). This transition to online learning posed stress and motivation issues for students (Yuzulia, 2021), requiring instructors to enhance engagement and adapt to technology limitations, student discipline, and assessment challenges (Cardullo et al., 2021). In this context, perceived behavioral control (PBC) became a critical factor.

This study aims to explore how faculty's PBC influences their attitudes and behaviors toward LMS in online learning, their willingness to use LMS, the impact of their belief in technology's performance-enhancing potential, and the interplay between attitudes, behaviors, and willingness regarding LMS adoption. Based on the background, researchers addressed four keys questions: (a) Does faculty's self-control ability in adapting to TAM affect their attitudes and behavior in online learning?; (b) Can faculty's self-control ability influence their desire and willingness to use LMS in online education?; (c) Does faculty's belief in technology's potential to improve their performance affect their attitudes and willingness to use LMS?; and (d) Do faculty's attitudes and behavior impact their desire and willingness to use LMS in online learning?

The concept of Perceived Behavioral Control (PBC) is rooted in the Theory of Planned Behavior (TPB) introduced by Icek Ajzen (1991). TPB emphasizes that an individual's intention to perform a specific behavior is a key predictor of their actual behavior. TPB has three dimensions (Azjen, 1991), namely: (a) attitude toward the behavior, referring to individual evaluations related to their behavior. This dimension emphasizes the belief that certain behavior produces favorable or unfavorable attitudes (behavioral belief); (b) subjective norms, namely the normative expectations of other people which produce social pressure or subjective norms. This dimension emphasizes beliefs that arise from within a person due to the influence of social aspects (normative beliefs); and (c) perceived behavioral control, namely beliefs within the individual regarding his ability to display behavior. This dimension refers to the presence of factors that can inhibit behavior, or difficulty in controlling behavior (control beliefs) (Ajzen, 2000). PBC, one of TPB's three dimensions, relates to an individual's belief in their ability to carry out a behavior. It focuses on the perceived control over one's actions and their understanding of factors that may hinder or facilitate the behavior (Ajzen, 2002). PBC is defined as an individual's subjective level of control over their behavior, specifically concerning their performance of the behavior itself, not the outcomes (Ajzen, 2022). It is based on an individual's perception of their capacity to perform a particular behavior, considering both the accessibility of necessary resources and the likelihood of success (Ajzen, 1991). A person will believe that he can do something if he believes that there are resources and opportunities to do it based on his decision to use these resources and opportunities (Yzer, 2012).

The Technology Acceptance Model (TAM), introduced by Davis in 1989, identifies two key factors influencing technology adoption: perceived ease of use (PEOU) and perceived usefulness (PU). TAM posits that PU is influenced by PEOU, meaning that when users find technology "easy to use," they perceive it as "useful." (Fathema et al., 2015). The model establishes causal relationships between factors like the user's perception of technology's benefits (PU), ease of use (PEOU), their attitude toward computer use (ATCU), and their intention to use technology (BI). Essentially, when someone believes technology is both useful and easy to use, they are more likely to intend to use it, leading to actual usage (Apay et al., 2012). In the TAM model, specific technologies like Learning Management Systems (LMS) impact a person's decision to use them if they are perceived as easy to use and beneficial (Cardullo et al, 2021).

A Learning Management System (LMS) is a web-based software platform facilitating interactive online learning and automating educational content administration, organization, delivery, and reporting (Turnbull et al., 2019). LMS typically offers eight main features: course management, assessment support, progress tracking, gradebooks, communication tools, social connectivity, security, and ubiquitous access (Turnbull et al., 2019). Studies have shown that LMS significantly impacts the learning process, making it more practical, engaging, and innovative while improving class management, content access, and fostering both online and blended learning (Dulkaman & Ali, 2016; Akay & Gumusoglu, 2020). Users find LMS user-friendly and beneficial, which enhances their independent learning (Rohmawati, 2022).

PBC is useful for assessing individual control in certain situations and this will tend to influence intentions and indirectly change behavior (Barua, 2013). Prior research by Barua (2013) and Sumadi et al. (2020), along with a study by Vasquez et al. (2019) on prudent antimicrobial use among dairy farmers, suggests that PBC positively affects individuals' intentions to engage with or use a given system. Furthermore, research by Liao et al. (2018) and Humida et al. (2022) emphasizes that PBC has a positive and significant impact on Perceived Ease of Use (PEOU), suggesting that when individuals feel less burdened by a system, they can better control their

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behavior in using it. The hypotheses revolve around Perceived Behavioral Control (PBC) and its influence on users' intentions and perceptions of ease of use within the context of online systems. As such, the proposed hypotheses are as follows: (H1) PBC positively influences the intention to use an online system, and (H2) PBC positively influences Perceived Ease of Use (PEOU).

Perceived Ease of Use (PEOU) reflects an individual's confidence that a system will make their tasks easier (Venkatesh and Davis, 2000). Research by Calisir et al. (2009) found that PEOU has a positive influence on users' attitudes toward the use of enterprise resource planning systems. In essence, the easier a system is to use, the more positive the user's attitude toward it. Ryadi, et al. (2021) stated that the higher the benefits consumers feel in shopping for groceries online, the higher the possibility of their interest in using online grocery shopping. Davis (1989) and Sudaryati et al. (2017) also support this notion, demonstrating indirect impacts of PEOU on Perceived Usefulness (PU) and individual behavior. Khan et al. (2020) identified PEOU as a significant predictor of PU, emphasizing that one's confidence in the system's ease of use significantly influences its adoption. The formulated hypotheses are as follows: (H3) PEOU positively affects attitude, and (H4) PEOU positively affects perceived usefulness (PU).

In the Theory of Planned Behavior by Ajzen (1991), intention significantly and positively influences attitude (Barua, 2013). Calisir et al. (2009) concluded that one's attitude toward a system positively affects their intention to use that system. Similarly, Bag et al. (2020) found that students held a positive attitude towards using online educational systems as an alternative to physical classroom learning, aligning with their intention to use online systems. This is consistent with research by Gong et al. (2004). Based on these findings, the hypothesis is formulated as follows: (H7) Attitude has a positive influence on the intention to use online systems.

Based on the development of the hypothesis above, the research conceptual framework is as follows:

Figure 1
Conceptual Framework

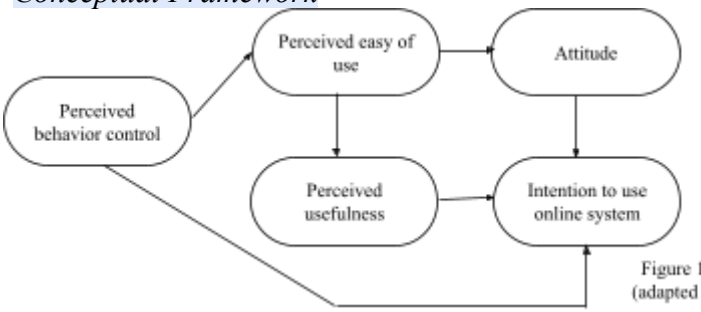

Figure 1. Conceptual Framework (adapted from Bag *et al.*, 2020)

2. RESEARCH METHOD

The study was conducted with active teaching faculty in private universities (PTS) in the Jabodetabek region from July to November 2021. A total of 300 Google Forms questionnaires were distributed, and 162 faculty members (54%) completed the surveys. A total of 162 respondents were included from 31 private universities in the Jabodetabek region. Among them, 57% were male and 43% were female, with the majority belonging to Generation X (45%) and Generation Y (30%). About 80% of the faculty had more than 5 years of teaching experience, and 81% had an academic ID number (NIDN/NIDK). Furthermore, 68% held a permanent faculty position at their university. During the COVID-19 pandemic, the majority of respondents

employed a combined synchronous and asynchronous teaching method (64%). Most respondents used a Learning Management System (LMS) with Zoom Meeting application (57%), while Google Meet was used by only 20 individuals (12%). Approximately 43% of the respondents found it easier to use the LMS features provided by their university. Throughout the pandemic, 59% of the respondents conducted virtual synchronous teaching for 14 sessions.

All constructs were measured using a Likert scale with answer categories ranging from 1 (strongly disagree) to 5 (strongly agree): *Perceived Behavioral Control (PBC)*: The measurement of PBC was adapted from Vamvaka et al. (2020) and consists of three dimensions: *Perceived Difficulty* with 2 statement items: "It is easy for me to start using the university's online learning platform and continue using it in the future" and "If I want to, I can easily use the online learning platform provided to enhance the quality of classroom teaching." *Perceived Confidence with 4 statement* items, e.g., "If I try to use the online learning platform, I will have a good chance of success in teaching," and "I have the skills and abilities to use the online learning platform provided by the university." *Perceived Controllability with 3 statement items*, such as "I can control the online learning process using the university's provided platform," and "Very few occurrences beyond my control can hinder me from conducting online learning." The Cronbach's Alpha for this variable is 0.906, and the composite reliability is 0.923, both exceeding the 0.70 threshold (Hair et al., 2017).

Technology Acceptance Model (TAM): The measurement of TAM was adapted from Bag et al. (2020) and comprises four dimensions: *Perceived Ease* of Use with 3 statement items, for example, "The online learning system using the university's provided platform greatly simplifies my teaching." *Perceived Usefulness* with 2 statement items, such as "The online learning system using the university's provided platform enables me to have more effective teaching with saved time and costs." *Attitude* with 3 statement items, including, "I prefer online learning through the university's provided platform to offline teaching." *Intention to Use Online System* with 3 statement items, for instance, "I am willing to adopt online learning through the university's provided platform as an alternative to offline teaching." The Cronbach's Alpha for this construct is 0.756, and the Composite Reliability is 0.870, both exceeding the 0.70 threshold (Hair et al., 2017).

3. RESULT AND DISCUSSION

This research aimed to analyze the influence of a lecturer's ability to control behavior (perceived behavioral control) in using the Learning Management System (LMS) during the Covid-19 pandemic on their desire to use LMS in online learning. Data analysis was conducted using the Smart PLS 3.0 program. Composite reliability and convergent validity values for each construct were assessed by looking at loading factors > 0.70 (Hair et al., 2017a). The analysis results indicate that the loading factors for each construct are > 0.70. Therefore, each construct has good relibiality and validity (Table 1 and 2).

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Table 1
Cronbach's Alpha and Composite Relibiality

Latent	*Cronbach's Alpha*	*Composite Reliability*
Attitude	0,761	0,863
Intention to Use Online System	0,836	0,891
Perceived Behavioral Control	0,906	0,923
Perceived Confidence	0,833	0,889
Perceived Controllability	0,787	0,875
Perceived Difficulty	0,797	0,908
Perceived Ease of Use	0,748	0,855
Perceived Usefulness	0,761	0,893

Table 2
Convergent Validity

Construct	*Loading Factor*	R critical	Criteria (*Loading Factor* ≥ 0.70)
Att1 <- Attitude	0,849	0,70	Valid
Att2 <- Attitude	0,848	0,70	Valid
Att3 <- Attitude	0,770	0,70	Valid
IUOS1 <- Intention to Use Online System	0,861	0,70	Valid
IUOS2 <- Intention to Use Online System	0,861	0,70	Valid
IUOS3 <- Intention to Use Online System	0,828	0,70	Valid
IUOS4 <- Intention to Use Online System	0,723	0,70	Valid
PConf1 <- Perceived Confidence	0,864	0,70	Valid
PConf2 <- Perceived Confidence	0,776	0,70	Valid
PConf3 <- Perceived Confidence	0,826	0,70	Valid
PConf4 <- Perceived Confidence	0,798	0,70	Valid
PCont1 <- Perceived Controllability	0,865	0,70	Valid
PCont2 <- Perceived Controllability	0,808	0,70	Valid

The results of the discriminant validity test show that all indicators have a higher correlation with their respective constructs compared to other constructs. It can be concluded that the research model has good discriminant validity in terms of cross-loading (Table 3).

Table 3
Discriminant Validity Cross-Loading

	Att	IUOS	Pconf	Pcont	PD	PEU	PU
Att1	**0,849**	0,616	0,527	0,535	0,524	0,577	0,500
Att2	**0,848**	0,650	0,528	0,476	0,580	0,540	0,439
Att3	**0,770**	0,774	0,466	0,473	0,596	0,500	0,338
IUOS1	0,670	**0,861**	0,499	0,484	0,616	0,516	0,421
IUOS2	0,651	**0,861**	0,479	0,469	0,618	0,481	0,380
IUOS3	0,660	**0,828**	0,524	0,410	0,572	0,566	0,404
IUOS4	0,727	**0,723**	0,615	0,417	0,639	0,554	0,421
PConf1	0,571	0,602	**0,864**	0,693	0,715	0,603	0,520
PConf2	0,385	0,390	**0,776**	0,532	0,535	0,433	0,270
PConf3	0,394	0,434	**0,826**	0,571	0,591	0,460	0,340
PConf4	0,651	0,686	**0,798**	0,507	0,708	0,521	0,347
PCont1	0,567	0,540	0,703	**0,865**	0,522	0,539	0,437
PCont2	0,497	0,426	0,478	**0,808**	0,440	0,594	0,490
PCont3	0,442	0,391	0,580	**0,837**	0,465	0,398	0,324
PD1	0,628	0,682	0,723	0,536	**0,914**	0,609	0,467
PD2	0,633	0,685	0,707	0,504	**0,909**	0,605	0,427
PEU1	0,631	0,655	0,615	0,530	0,683	**0,857**	0,484
PEU2	0,465	0,462	0,446	0,470	0,512	**0,843**	0,517
PEU3	0,481	0,434	0,430	0,478	0,391	**0,741**	0,525
PU1	0,507	0,474	0,408	0,447	0,440	0,560	**0,915**
PU2	0,414	0,418	0,420	0,444	0,442	0,552	**0,880**

The structural model test (inner model) is useful for analyzing the results of relationships between constructs. The inner model testing consists of R-square, F-square, Q-square predictive relevance, and hypothesis testing. An R-Square value of 0.67 indicates a strong model, a value of 0.33 suggests a moderate model, and a value of 0.19 indicates a weak model (Chin, 1998 in Yamin & Kurniawan, 2011).

R-Square tests for the "perceived difficulty" dimension show a value of 0.751, meaning that perceived difficulty can explain the latent variable perceived behavioral control (PBC) by 75.1%. For the "perceived confidence" dimension, the R-Square value is 0.904, indicating that perceived confidence can explain the latent variable PBC by 90.4%. The "perceived controllability" dimension has an R-Square of 0.719, suggesting that perceived controllability can explain the latent variable PBC by 71.9%. The R-Square value for the "perceived ease of use" variable is 0.494, indicating that it is influenced by the latent variable PBC by 49.4%, while the remaining 50.6% is influenced by other unobserved factors. The "attitude" variable has an R-Square of 0.450, meaning that it is influenced by the latent variables perceived ease of use and perceived usefulness by 45.0%, while the remaining 55.0% is influenced by unobserved factors. The "intention to use online system" variable has an R-Square of 0.727, suggesting that it is influenced by the latent variable PBC through perceived ease of use and attitude, as well as being influenced by perceived usefulness by 72.7%. The remaining 27.3% is influenced by unobserved factors.

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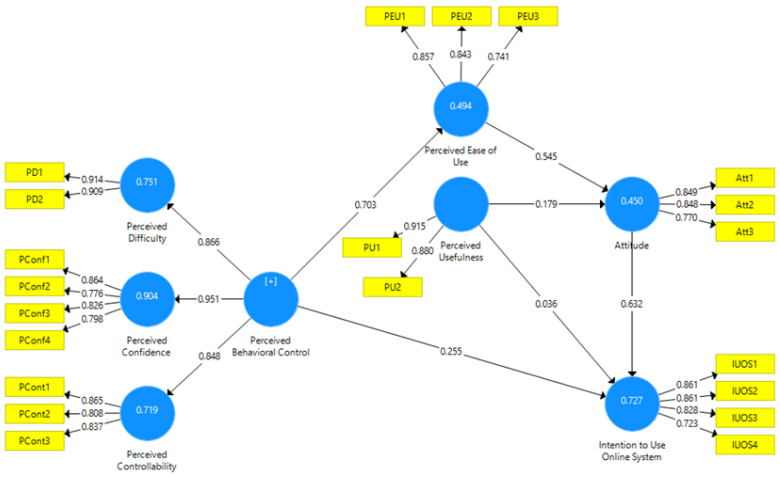
The F-Square test uses Cohen's (1988) standards, where an effect size of 0.02 is considered small, 0.15 is moderate, and 0.35 is large. The F-Square test results indicate that the effect size of PBC on perceived ease of use is large (0.977), perceived ease of use has a moderate impact (0.333) on attitude, and perceived usefulness has a small impact (0.036) on attitude. PBC has a small impact (0.110) on the intention to use the online system, while attitude has a large impact (0.694) on the intention to use the online system, and perceived usefulness has a small impact (0.003) on the intention to use the online system.

The Q-Square test measures how well the observed values produced by the model match the estimated parameters. A Q-Square value greater than 0 indicates that the model has predictive relevance, and in this case, the value is 0.999 or 99.9%, meaning that the model's structural influence is well-reconstructed relative to the observed measurements for the latent endogenous variables, with only 0.1% as model error.

Hypothesis testing is performed using path coefficient values, t-values, and p-values. The significance and predictability of hypothesis testing can be assessed through path coefficient and t-value according to Kock (2016). The significance can also be assessed using p-values. With a 95% confidence level (alpha 5%) and two-tailed test, the t-table value is 1.96. If the t-statistic value is > 1.96 (used for direct effects), then H0 is rejected and H1 is accepted. If the t-statistic value is < 1.96 (used for direct effects), then H0 is accepted and H1 is rejected. The significance between the variables being tested is presented in the form of values on the arrows connecting one variable to the target variable.

Figure 2

Structural Model (Path Coefficients, Beta)



Based on Figure 1, the hypothesis testing using the bootstrapping method with SmartPLS software yielded the following results: Hypothesis 1: Perceived Behavioral Control has a positive and significant effect on perceived ease of use. The original sample value (O) = 0.703, and the t-statistic value = 14.284 > t table or 14.284 > 1.96, and the p-value = 0.000 < alpha 5% (0.05). Therefore, H1 is accepted. Hypothesis 2: Perceived Behavioral Control has a positive and significant effect on Intention to Use Online System. The original sample value (O) = 0.255, and the t-statistic value = 3.808 > t table or 3.808 > 1.96, and the p-value = 0.000 < alpha 5% (0.05). Therefore, H2 is accepted. Hypothesis 3: Perceived Ease of Use has a positive and significant effect on attitude. The original sample value (O) = 0.545; the t-statistic value = 6.939 > t table or

6.939 > 1.96, and the p-value = 0.000 < alpha 5% (0.05). Therefore, H3 is accepted. Hypothesis 4: Perceived Behavioral Control has a positive and significant effect on attitude through Perceived Ease of Use. The original sample value (O) = 0.383; the t-statistic value = 5.672 > t table or 5.672 > 1.96; and the p-value = 0.000 < alpha 5% (0.05). Therefore, H4 is accepted. Hypothesis 5: Perceived Usefulness has a significant effect on attitude. The original sample value (O) = 0.179; the t-statistic value = 1.985 > t table or 1.985 > 1.96; and the p-value = 0.000 < alpha 5% (0.05). Therefore, H5 is accepted. Hypothesis 6: Perceived Usefulness has a positive and significant effect on Intention to Use Online System. The original Sample value (O) = 0.036; the t-statistic value = 0.562 < or 0.562 < 1.96; and the p-value = 0.575 > alpha 5% (0.05). Therefore, H6 is rejected. Hypothesis 7: Attitude has a significant effect on Intention to Use Online System. The original sample value (O) = 0.632; the t-statistic value = 9.943 > t table or 9.943 > 1.96; and the p-value = 0.000 < alpha 5% (0.05). Therefore, H7 is accepted. Based on the hypothesis testing results, this study has addressed four research questions related to (1) the ability of lecturers to self-control in adapting TAM affects attitudes and behavior in online learning; (2) the ability of lecturers to self-control can affect their willingness and desire to use LMS in online learning; (3) lecturers' beliefs that technology can improve their performance affects attitudes and willingness to use LMS; and (4) the attitudes and behavior of lecturers affect their willingness and desire to use LMS in online learning.

The data analysis results show that lecturers have high self-control in adapting TAM, which has a positive effect on their attitudes and behavior in online learning. This proves that lecturers are confident about the use of LMS, which facilitates their work (Hypothesis 1), and therefore, they show positive attitudes and behavior in using LMS (Hypothesis 3). This is supported by the benefits lecturers perceive from the use of this technology (Hypothesis 4). However, the findings in this study are contrary to the findings of Davis (1989) in Bag et al. (2020), which stated that the influence is only indirect. On the contrary, this study proves that lecturers' self-control has a strong influence on their confidence in using LMS and the positive attitude they show towards LMS.

Furthermore, the second question related to whether the ability of lecturers to self-control can affect their willingness and desire to use LMS in online learning has been proven in this study (Hypothesis 2). Lecturers' confidence in their ability to use LMS enables them to adapt the online learning system prepared by the university because they feel that LMS is an intelligent system available and are willing to use it in the current situation during the Covid-19 pandemic and in the future. This result supports the findings of Deslonde and Becerra (2018), which found that the adaptation of TAM in schools is very easy and beneficial for counselors who assist students. This result also reinforces the findings of Fahtema et al. (2015) regarding the use of LMS in Higher Education Institutions by confirming the adaptation of TAM in learning.

Another interesting finding is that lecturers' belief that technology can improve their performance does have an impact on their attitudes (Hypothesis 5), but it does not have an impact on their willingness to use LMS in online learning (Hypothesis 6). The result of the study in line with Kurniasari et al. (2023) who stated that although in Technology Acceptance Model (TAM) theory, perceived ease of use is an essential factor for using new technology but the ease of understanding or operating a service will not guarantee that it will increase the behavioral intention to use Traveloka Paylater.

4. CONCLUSIONS AND RECOMMENDATIONS

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This research, which analyzes the influence of lecturers' perceived behavioral control (PBC) on the intention to use an online system in online learning using the Technology Acceptance Model (TAM) approach, has demonstrated that, in general, lecturers feel confident and self-assured in using the Learning Management System (LMS) provided by their universities. Lecturers hold behavioral beliefs, normative beliefs, and control beliefs to facilitate teaching students. They believe that the university-provided LMS is effective in facilitating learning and makes their teaching more accessible. This is evident from the confirmation of all the research hypotheses.

Based on the research findings and discussions, it can be concluded that six hypotheses have been proven to have significant effects, namely: (H1) Perceived behavioral control has a significant effect on perceived ease of use; (H2) Perceived behavioral control has a significant effect on the intention to use the online system; (H3) Perceived ease of use has a significant effect on attitude; (H4) Perceived behavioral control has a significant effect on attitude through perceived ease of use; (H5) Perceived usefulness has a significant effect on attitude; and (H7) Attitude has a significant effect on the intention to use the online system. However, Hypothesis 6, which proposed that Perceived Usefulness has a significant effect on the intention to use the online system, is not supported.

These findings demonstrate that lecturers' control over their attitudes to adapt the TAM in online learning has influenced their attitudes toward the university-provided LMS, leading to a strong desire to use it both now and in the future. Therefore, all research questions have received affirmative answers, except for specific difficulties that lecturers encounter regarding the use of LMS features. Nevertheless, the descriptive analysis of research variables indicates that the level of lecturers' confidence in two aspects of their behavior is still moderate. Regarding the attitude variable, lecturers' confidence in online learning aspects is only at 66%, which is considered moderate. In the perceived ease of use variable, lecturers' self-confidence in the LMS system, which does not require significant mental effort, is only at 64%. This implies that these aspects are still perceived as challenging by lecturers.

The research findings show that the online learning process facilitated by lecturers is going well. Although not all universities have the same comprehensive LMS facilities, lecturers' confidence in their ability to teach is very high. This significantly influences lecturers' attitudes towards the ongoing online learning system. Lecturers can adapt to the available LMS and make maximum efforts to use it. In other words, there is no resistance among lecturers to the LMS available at universities. Lecturers' readiness and ability to use the LMS in the teaching process can strengthen the online learning model as an effective method in higher education. Furthermore, this research was conducted in the Jabodetabek region. This means that the research results cannot be generalized for all of Indonesia. Additionally, the number of research respondents is relatively small, consisting of 162 individuals. Therefore, the analysis results may not fully depict the actual reality. Moreover, the research respondents were not separated according to their study programs, so specific insights into lecturers' PBC based on the courses they teach were not obtained. Further research should be conducted with a broader scope, a larger number of respondents, and specific details regarding lecturers' PBC based on their study programs. The practical implications derived from this research are that online learning can be applied in the post-COVID-19 era and can become an effective learning model in private universities with adequate LMS facilities.

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REFERENCE

Akay, E. and Gumusoglu, E.K. (2020), The impact of learning management systems on students' achievement in language exams, *Turkish Online Journal of Distance Education-TOJDE*, *21*(4).

Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, *50*(2), 179-211. https://doi.org/10.1016/0749-5978(91)90020-T.

Ajzen, I. (2002). Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior, *Journal of Applied Social Psychology,* 32, 4, pp. 665-683.

Bag, S., Aich, P., & Islam, M. A. (2022). Behavioral intention of "digital natives" toward adapting the online education system in higher education. *Journal of Applied Research in Higher Education*, *14*(1), 16-40. https://doi.org/10.1108/JARHE-08-2020-0278.

Barua, P. (2013). The moderating role of perceived behavioral control: The literature criticism and methodological considerations. *International Journal of Business and Social Science*, *4*(10).

Calisir, F., Altin Gumussoy, C., & Bayram, A. (2009). Predicting the behavioral intention to use enterprise resource planning systems: An exploratory extension of the technology acceptance model. *Management research news*, *32*(7), 597-613. https://doi.org/10.1108/01409170910965215.

Cardullo, V., Wang, C. H., Burton, M., & Dong, J. (2021). K-12 teachers' remote teaching self-efficacy during the pandemic. *Journal of research in innovative teaching & learning*, *14*(1), 32-45. https://doi.org/10.1108/JRIT-10-2020-0055.

Deslonde, V., & Becerra, M. (2018). The Technology Acceptance Model (TAM): Exploring School Counselors' Acceptance and Use of Naviance. *Professional Counselor*, *8*(4), 369-382.

Dulkaman, N. S., & Ali, A. M. (2016). Factors influencing the success of learning management system (LMS) on students' academic performance. *International Young Scholars Journal of Languages*, *1*(1), 36-49.

Fathema, N., Shannon, D., & Ross, M. (2015). Expanding the technology acceptance model (TAM) to examine faculty use of learning management systems (LMSs) in higher education institutions. *Journal of Online Learning & Teaching*, *11*(2).

Gong, M., Xu, Y. & Yu, Y. (2004), And enhanced technology acceptance model for web based learning, *Journal of Information Systems Education*, *15*(4).

Hair, J.F., Hult, G.T.M., Ringle, C.M. and Sarstedt, M. (2017a). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage.

Humida, T., Al Mamun, M. H., & Keikhosrokiani, P. (2022). Predicting behavioral intention to use e-learning system: A case-study in Begum Rokeya University, Rangpur, Bangladesh. *Education and information technologies*, *27*(2), 2241-2265. https://doi.org/10.1007/s10639-021-10707-9.

Khan, S. A., Zainuddin, M., Mahi, M. A., & Arif, I. (2020, December). Behavioral intention to use online learning during COVID-19: An analysis of the technology acceptance model. In *International Conference on Innovative Methods of Teaching and Technological Advancements in Higher Education (IMTTAHE). Tbilisi, Georgia*.

Kock, N. (2016). Hypothesis testing with confidence intervals and P values in PLS-SEM. *International Journal of e-Collaboration (IJeC)*, *12*(3), 1-6. https://doi.org/10.4018/IJeC.2016070101.

Kulviwat, S., C. Bruner II, G., & P. Neelankavil, J. (2014). Self-efficacy as an antecedent of cognition and affect in technology acceptance. *Journal of Consumer Marketing*, *31*(3), 190-199. https://doi.org/10.1108/JCM-10-2013-0727.

Kurniasari, F., Prihanto, J. N., Andre, N. (2023). Identifying determinant factors influencing user's behavioral intention to use Traveloka Paylater. *Eastern-European Journal of Enterprise Technologies*, *122*(13), 52–61. https://doi.org/10.15587/1729-4061.2023.275735.

Liao, S., Hong, J. C., Wen, M. H., & Pan, Y. C. (2018). Applying technology acceptance model (TAM) to explore users' behavioral intention to adopt a performance assessment system for E-book production. *EURASIA Journal of Mathematics, Science and Technology Education, 14*(10). https://doi.org/10.29333/ejmste/93575.

Ryadi, W., T., Kurniasari, F., & Sudiyono, K. A. (2021). Factors influencing consumer's intention towards e-grocery shopping: An extended technology acceptance model approach. *Economics, Management and Sustainability*, *6*(2), 146-159. https://doi.org/10.14254/jems.2021.6-2.11.

Rohmawati, R. (2022), Efektivitas penggunaan media pembelajaran learning management system (LMS) sebagai media pembelajaran daring mahasiswa saat pandemi Covid 19, *Sinau: Jurnal Ilmu Pendidikan dan Humaniora*, *8*(1), 29-35.

Sudaryati, E., Agustia, D. and Syahputra, M.I. (2017). The influence of perceived usefulness, perceived ease of use, attitude, subjectif norm, and perceived behavioral control to actual usage PSAK 45 Revision on 2011 with Intention as Intervening Variable in UNAIR Financial Departement, *International Conference of Organizational Innovation (ICOI 2017), Advances in Intelligent Systems Research*, 131. 86-92. Atlantis Press.

Turnbull. D., Chugh, R., and Luck, Jo. (2019). Learning management systems: An overview, *Encyclopedia of Education and Information Technologies*, https://doi.org/10.1007/978-3-319-60013-0_248-1.

Vasquez, A. K., Foditsch, C., Dulièpre, S. A. C., Siler, J. D., Just, D. R., Warnick, L. D., ... & Sok, J. (2019). Understanding the effect of producers' attitudes, perceived norms, and perceived behavioral control on intentions to use antimicrobials prudently on New York dairy farms. *PloS one*, *14*(9), https://doi.org/10.1371/journal.pone.0222442.

Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management science*, *46*(2), 186-204. https://doi.org/10.1287/mnsc.46.2.186.11926.

Yuzulia, I. (2021). The challenges of online learning during pandemic: Students' voice. *Wanastra: Jurnal Bahasa dan Sastra*, *13*(1), 08-12. https://doi.org/10.31294/w.v13i1.9759.