CASE STUDY

UNLOCKING THE POTENTIAL: UNVEILING THE PATH TO STUDENT ENGAGEMENT IN M- LEARNING THROUGH MOODLE AT HUFLIT UNIVERSITY

Dang Thi Thu Hang[1], Hoang Duc Sinh[2]

[1] Faculty of Economics and Finance – Ho Chi Minh City of Foreign Languages and Information Technology
[2] School of Business – International University

hangdtt@huflit.edu.vn, hdsinh@hcmiu.edu.vn

ABSTRACT— This study aims to examine the factors influencing the intention to adopt Moodle at HUFLIT University. Both perceived usefulness and perceived ease of use positively impact users' attitudes, making them more inclined to adopt Moodle. Meanwhile, when users perceive high technical support from IT departments as well as related faculties and universities, students may find it easier to frequently utilize it. Additionally, technical support plays a crucial role in motivating the adoption of eLearning. Using PLS-SEM on a sample of 572 participants from HUFLIT University, the study confirms the significance of the Moodle platform at HUFLIT University. This study highlights the important role of E-learning for all stakeholders in education. E-learning is a key factor of innovation in modern education, providing flexible, accessible, and personalized learning options for students and educators. Moodle enhances education by providing a flexible, accessible platform for students to access materials, submit assignments, and participate in discussions. For educators, it streamlines course management, content delivery, and communication. Its customizable features support diverse teaching methods, promoting collaborative and effective learning environments.

Keywords— Moodle, Elearning, PLS-SEM, adaptable, accessible

I. INTRODUCTION

Currently, the terms “E-learning”, “Digital learning” or “Digital Classroom” are so ubiquitous, especially since the COVID-19 outbreak. ELearning spans various categories, such as computer-based learning, internet-based education, and online learning. It involves the utilization of e-books, social network platforms, audio-visual technology, and digital broadcasting networks [15], [20]. Specifically, a digital classroom is a contemporary educational method that incorporates cooperative, cost-effective, and inventive elements to improve the process of teaching and learning. Through the utilization of cloud-based document sharing, discussion forums, and virtual group projects, students can work effectively regardless of their geographical locations [28]. The cost-effectiveness of digital resources diminishes the reliance on conventional textbooks, therefore enhancing educational accessibility for a wider range of individuals. Teachers as well as lecturers gain several advantages from the digital classroom by using automated grading systems, lesson planning software, and diversified multimedia content. These tools improve the efficiency and engagement of instruction [28].

Moreover, the digital classroom offers improved learning opportunities by incorporating interactive simulations, gamified learning applications, and virtual reality modules that engage students and promote their comprehension. Ensuring accessibility is a crucial element of the digital classroom since it provides resources that are always accessible to cater to different learning styles and speeds. Additionally, it supports students with impairments by utilizing adaptive technologies. The ability to adapt ensures ongoing learning that meets the requirements of both students and educators, creating a dynamic and responsive educational environment [28].

Accordingly, the statistical data clearly show 417 million users, 240 countries, 2.4 billion enrolments, and nearly 47 million courses delivered through the Moodle platform (Moodle, 2024). With the prevalence of digital platforms in over 240 nations the role of universities or short courses should pay attention to enhance the awareness and engagement of digital classrooms. Ultimately, the digital classroom represents a substantial transformation in education, providing a multitude of advantages that enhance cooperation, cost-effectiveness, and ingenuity in the educational experience. Through the adoption of digital tools and technology, educators may create dynamic and all-encompassing learning environments that cater to the varied requirements of students, ultimately influencing the trajectory of education.

E-learning has significantly transformed education by offering unmatched access to resources, fostering flexibility, and accommodating diverse learning styles. Online platforms have eliminated geographical barriers, democratized education, and enabled global access to extensive information and instructional materials [78]. This mode of learning supports self-paced study, allowing individuals to progress according to their unique schedules and needs, benefiting working professionals and those with other commitments [78]. Additionally, e-learning uses multimedia tools and interactive content to enhance engagement and comprehension, catering to different learning preferences and improving educational outcomes [78]. Incorporating technology into

curricula allows educational institutions to offer a more personalized and inclusive learning experience, preparing students for the digital world.

The development and validation of educational technologies are crucial in enhancing learning outcomes and positively impacting various populations [40]. With the tremendous role of “Elearning” or “Digital Classrooms”, this attempt aims to investigate the path that engages Huflit students to interact with these platforms. While previous studies utilize technical support as the direct path, this attempt examines the role of technical support as a moderator to strengthen the intention to adopt Moodle from a university perspective.

The following section will overview the literature review while section 3 will discuss the methodology which instructs how to conduct this attempt. Results and discussions will be revealed in section 4 while section 5 will provide general conclusions and limitations in the context of the intention to adopt Moodle at Huflit University perspective.

II. LITERATURE REVIEW

A. MEANING OF ELEARNING

E-learning, or electronic learning, leverages digital technologies to deliver educational content and experiences outside traditional classrooms. Utilizing the internet, computers, and mobile devices, e-learning provides access to educational resources, interactive tools, and communication channels for both learners and instructors [50]. This approach enables interactions in a virtual environment, offering flexible learning opportunities that overcome geographical and time constraints [62]. It supports various learning forms, including formal, non-formal, and informal, and can be tailored to individual needs through recommendation systems and personalized content [4], [37]. E-learning enhances engagement, reduces communication gaps between students and instructors, and offers cost-effective and convenient solutions [66], [24]. The integration of multimedia tools, interactive content, and simulations further enriches the learning experience and improves knowledge retention [48], [30], [70]. Overall, e-learning is pivotal in modern education, providing accessible, inclusive, and engaging learning opportunities suited to the digital age.

B. TECHNICAL ACCEPTANCE MODEL

The Technology Acceptance Model (TAM) is a well-established framework that highlights the significance of perceived usefulness and perceived ease of use as crucial determinants impacting the adoption of technology [10]. The Technology Acceptance Model (TAM) has developed into a significant paradigm for comprehending the aspects that impact individuals' willingness to adopt or decline technology [14]. The efficacy of this technique in identifying factors that impact the acceptance of technology in various contexts is well acknowledged. It is frequently employed in the domain of information systems [14]. The Technology Acceptance Model (TAM), developed by Davis, is a significant tool for forecasting individuals' inclination to adopt and accept information systems and technology [6]. This model incorporates latent variables with explicit interconnections, rendering it a thorough instrument for comprehending technological acceptability [13]. The model's adaptability and efficacy in analyzing individuals' inclination to adopt new technologies render it a valuable instrument for studying technology acceptance [45]. The extensive utilization and verification of this model emphasizes its significance in clarifying and forecasting the uptake of technology [74]. The Technology acceptability Model is a comprehensive framework that extensively examines the elements that influence the acceptability of technology in various domains.

C. PERCEIVED EASE OF USE

Perceived ease of use, a crucial component in technology adoption models, refers to a user's perception of how straightforward and effortless it is to operate with a particular system [21]. According to [35], technological effortlessness refers to the degree to which an individual believes that using technology will require minimal exertion. The perception is influenced by aspects such as the system's level of interface clarity, the cognitive effort required, and the simplicity of completing necessary activities with the system [29].

Additionally, perceived ease of use plays a major impact on users' attitudes and intentions to adopt a certain technology [21]. Users' impressions of a system's usability and functionality are influenced by the notion that it would be user-friendly and require minimal effort [43]. Research has indicated that the perceived ease of use is to use anything has a favorable effect on how beneficial it is regarded to be. This, in turn, affects how readily users accept and intend to utilize the technology [80]. The truth is the perceived ease of use has an indirect impact on behavioral intention using perceived usefulness which is emphasized by [7]. This study sheds light on the significant importance of the perceived simplicity of use in facilitating user acceptance and adoption of technology, as it immediately enhances users' trust in utilizing the system without facing unnecessary complications or difficulties [16].

Furthermore, perceived behavioral control has a good effect on the desire to adopt new technologies, such as Moodle [64]. Within the framework of Moodle adoption, this idea refers to the level of assurance that users have in their capacity to proficiently utilize the platform and successfully overcome any obstacles [73]. Moreover, [66] have explained that individuals' inclination to accept technology is heightened when they possess the requisite resources and abilities to utilize it. In addition, the influence of perceived behavioral control on the desire to adopt online banking and other digital services is widely acknowledged [61].

H1: Perceived ease of use has a positive impact on attitude toward Moodle

D. PERCEIVED USEFULNESS

Perceived usefulness, a key element in technology adoption models, refers to the subjective assessment of how a particular technology might enhance an individual's performance and productivity [54]. It pertains to the conviction in the advantages and worth that the utilization of the system would provide to the user [58]. Additionally, [54] has pointed out that perceived usefulness is influenced by factors such as the technology's effect on task completion and its alignment with the user's needs.

According to [62] and [21], perceived usefulness, a fundamental term in the adoption of technology, pertains to an individual's conviction regarding the extent to which a particular technology might enhance their performance and productivity. Furthermore, Perceived usefulness is influenced by multiple elements, such as the technology's effect on completing tasks and its alignment with the user's needs. Studies continually highlight the significance of perceived utility in influencing consumers' attitudes and intentions toward embracing technology [73]. Meanwhile, perceived usefulness has a favorable impact on user acceptability and intention to use technology, emphasizing its vital role in encouraging the adoption of technology [62], [21].

Furthermore, the perceived usefulness of Moodle as an e-learning platform significantly influences the inclination to embrace it. The significance of perceived usefulness in making judgments about the usage of information technology [21], [41]. The integration of the Technology Acceptance Model (TAM) and the Information Systems Success Model (ISSM) in examining satisfaction and ongoing usage of Moodle highlights the significance of perceived usefulness in influencing the intention to utilize the platform [41]. Moreover, [74] demonstrates that university professors are more likely to embrace Moodle when they perceive it to improve their job effectiveness. Moreover, [56] discovered that the users' inclination to utilize e-learning platforms such as Moodle was greatly impacted by their perception of the platform's usefulness and simplicity of use during the COVID-19 epidemic. The data together indicate that the perceived usefulness of Moodle significantly influences users' inclinations to adopt and maintain its use.

H2: Perceived usefulness has a positive impact on attitude toward Moodle

E. ATTITUDE

Attitude is a complex psychological concept that includes an individual's evaluative responses, beliefs, and behavioral tendencies toward an item, person, or event. It encompasses the integration of cognitive, emotive, and behavioral elements that influence an individual's overall attitude or inclination toward a specific item [76]. Attitudes are not fixed but can be shaped by different elements, such as knowledge, relevance, and complexity. These factors, in turn, impact the consistency between attitudes and behavior [23].

Attitudes play a crucial role in several perspectives, in particular, the acceptance and utilization of technology. Both [21] and [78] emphasize the significance of attitudes in forecasting and elucidating user acceptance of information technology. Attitudes, such as perceived usefulness and perceived ease of use, have a crucial role in influencing users' intentions to adopt new technologies, such as e-learning platforms [70]. Additionally, Islam (2012) discovered that the perceived ease of use and perceived usefulness of e-learning systems had a substantial impact on users' satisfaction and their incentive to continue using them. Attitudes have a vital role in influencing how individuals perceive, behave, and make decisions, making them key determinants in comprehending patterns of technology acceptance and usage [27].

Moreover, attitudes play a vital role in determining individuals' inclination to adopt Moodle as an e-learning platform. [36] emphasize that individuals' attitudes towards utilizing Moodle, as well as their perception of its utility and simplicity of use, significantly influence the actual usage of the platform. Furthermore, [70] discovered that students' ongoing desire to utilize Moodle is strongly influenced by their attitude towards the platform. In addition, [49] highlights that students' judgments of the utility and user-friendliness of virtual learning environments have a beneficial impact on their intention to effectively participate in Moodle. These studies highlight the significance of attitudes in influencing individuals' intentions to embrace and use Moodle. Meanwhile, this study suggests that having positive attitudes can increase user engagement and facilitate effective use of Moodle in educational environments.

H3: Attitude has a positive impact with the intention to adopt Moodle

F. TECHNICAL SUPPORT

Technical assistance refers to a variety of services offered to help users solve technical issues relating to technology products or services. The process encompasses the identification and resolution of problems, the upkeep and installation of software or hardware, and the enhancement of performance for end-users. Support can be provided through different channels, including telephone, email, live chat, or in-person assistance [82].

Technical support plays a crucial role in many situations, greatly influencing the user's experience and the performance of the system. Specifically, technical support is substantial in healthcare to ensure the successful implementation of electronic medical records (EMRs) by physicians. These systems are intricate and necessitate adequate training and help for optimal utilization [12]. Furthermore, within educational environments, the provision of technical assistance plays a crucial role in determining the level of adoption of technology for teaching purposes and the happiness of users [62]. Meanwhile, technical support affects significantly the workplace by facilitating the implementation of new technologies, mitigating technostress, and promoting employees' well-being through comprehensive training, guidance, and assistance [11].

The presence of technical assistance plays a pivotal role in shaping individuals' attitudes toward their willingness to use Moodle, an e-learning platform. Studies have shown that technical support has a notable indirect impact on attitude, emphasizing its significance at an individual level and through online platforms, as well as in educating users to proficiently utilize Moodle [62]. The presence of technical support has a direct influence on students' assessment of the user-friendliness of Moodle, which in turn affects their inclination to continue using the system [68]. Furthermore, technical support plays a crucial role in resolving technology-related difficulties such as dependability, connectivity, and infrastructure. It also assists users who experience abrupt technological problems when accessing Moodle [54], [55]. Robust technical assistance provided by institutions can improve users' attitudes toward Moodle and raise their intention to embrace and persist in utilizing the platform for productive learning experiences.

H4a: Technical support has a positive impact on the link between perceived usefulness with attitude toward Moodle

H4b: Technical support has a positive impact on the link between perceived ease of use with attitude toward Moodle

G. INTENTION TO ADOPT MOODLE.

The intention to adopt Moodle, an eLearning platform, depends on individuals' inclination and preparedness to use the system for educational objectives. The formation of this intention is influenced by aspects such as perceived usefulness, ease of use, attitude towards the platform, and the behavioral inclination to effectively utilize it [36]. Much research has shown that users' attitudes toward the Moodle platform are influenced by their perception of its utility and simplicity of use. This, in turn, affects their desire to adopt and continue using Moodle for learning purposes [46].

The choice to utilize Moodle, a digital learning platform, is of utmost importance in educational environments and beyond. Studies suggest that users' readiness to embrace Moodle is influenced by characteristics such as perceived usefulness, convenience of usage, attitude toward the platform, and behavioral intention [78], [1]. By prioritizing the improvement of students' willingness to use Moodle, educational institutions can increase participation, improve educational achievements, and promote a seamless shift to digital learning environments [19], [53]. Moreover, fostering a favorable inclination towards adopting Moodle can lead to higher levels of acceptance, utilization, and satisfaction with the platform, ultimately improving the educational experience for students and educators [46]. Hence, comprehending the significance of the purpose of embracing Moodle is crucial for the effective implementation of e-learning and for optimizing the advantages of technology-enhanced education [41], [22].

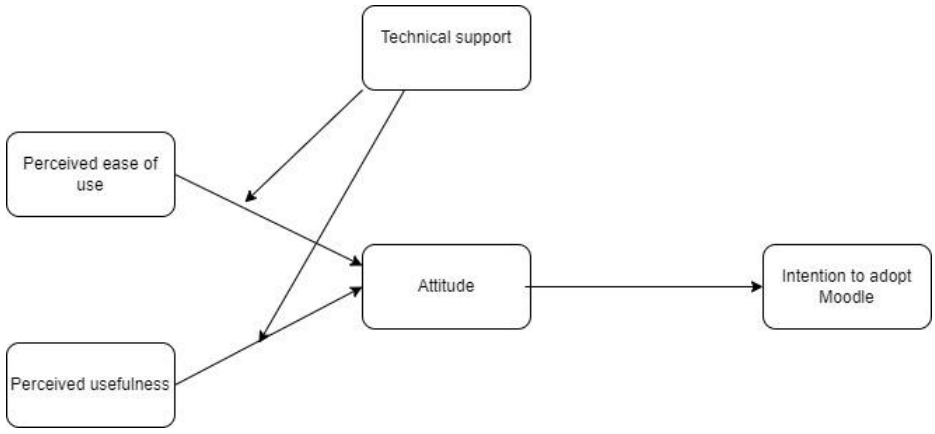

Figure 1. *Empirical model*

Source: own elaboration

III. METHODOLOGY

A. DATA COLLECTION AND ANALYSIS

This research incorporated the scales developed by [25], [59], [69]. While questionnaires are commonly employed for data collection, ensuring the reliability and validity of measurements is crucial, especially in studies utilizing a novel measure like the intention to adopt Moodle at HUFLIT University. In this research, we employed a back-translation approach to create a Vietnamese questionnaire version. The translation involved collaboration between an expert fluent in both English and Vietnamese. To enhance readability, a Vietnamese-fluent, English-speaking expert then translated the questionnaire back into English.

Samples are conducted by students at HUFLIT University. Specifically, students who are from the Faculty of Economics Finance, Faculty of Foreign Languages Faculty, Faculty of Information Technology, Faculty of Business and Administration, Faculty of Laws, and Faculty of Tourism, etc, used to interact with Moodle. A screening question determined eligibility, and only those who had experienced Moodle proceeded to answer the questionnaire. The Likert five-point scale, with options ranging from "highly disagree" to "highly agree," was utilized for operationalizing items.

Out of 1000 distributed questionnaires, 745 responses were received from students who have experience with the Elearning platform. After careful examination, questionnaires with missing data or significant discrepancies were discarded, resulting in a final sample of 572 participants. This sample size surpassed the minimum requirement of 145 respondents for Structural Equation Modeling (SEM) analysis.

Table 1. *Variables explanation*

Source: own elaboration

	Items	Adapted Sources
Perceived usefulness (PU)	PU1. The Moodle system helps me to learn more efficiently	[22]
	PU2. The Moodle system improves my academic performance	
	PU3. The Moodle system makes my learning more effective	
	PU4. The Moodle system is advantageous for my learning	
Perceived ease of use (PEU)	PEU1. Learning to use the Moodle system is easy for me	[62]
	PEU2. It is easy to get materials from the Moodle system	
	PEU3. The process of using the Moodle system is clear and understandable	
	PEU4. I believe that the Moodle system is easy to use	
Attitude (ATT)	ATT1. Learning on the Moodle system is fun	[62]
	ATT2. Using the Moodle system is a good idea	
	ATT3. I like using the Moodle system	
Technical support (TS)	TS1. The system assists when there is a technical problem	[62]
	TS2. A hotline is available at any time	
Intention to adopt Moodle (Intention)	Intention 1. I intended to adopt Moodle for learning	[69]
	Intention 2. I intended to adopt Moodle frequently for learning purposes	
	Intention 3. I would seriously contemplate Moodle for learning purposes	

B. DESCRIPTIVE AND DEMOGRAPHIC STATISTICS

Referring to Table 2, approximately respondents are female, which take accounted for 60.66% while males only accounted for 39.34%. The majority of respondents are sophomores, which accounted for 30.59%, followed by seniors taking about 28.85%. While the lowest proportion of respondents are freshmen (13.11%). It is explained that freshmen are so new to getting acquainted with Moodle that they take more time to equip themselves. The University should pay attention to enhancing its awareness of Moodle, especially from the HUFLIT University perspective.

Table 2. *Demographic Characteristics*

Source: own elaboration

Demographic Characteristics		**Frequency**	**Percentage**
Gender	Male	225	39.34%
	Female	347	60.66%
Year at university	Freshman	75	13.11%
	Sophomore	175	30.59%
	Junior	157	27.45%
	Senior	165	28.85%

Table 3. *Descriptive statistics of the questionnaire items*

Source: own elaboration

	Mean	**Median**	**Standard deviation**
ATT1	0.000	-0.052	0.541
ATT2	0.000	0.049	0.528
ATT3	0.000	-0.003	0.542
Intention1	0.000	0.078	0.562
Intention2	0.000	-0.090	0.581
Intention3	0.000	0.017	0.495
PEU1	0.000	0.035	0.544
PEU2	0.000	-0.011	0.600
PEU3	0.000	-0.049	0.523
PEU4	0.000	0.029	0.567
PU1	0.000	-0.006	0.592
PU2	0.000	-0.012	0.576
PU3	0.000	0.043	0.625
PU4	0.000	-0.006	0.633
TS1	0.000	0.027	0.612
TS2	0.000	-0.015	0.343

IV. DATA ANALYSIS

A. STATISTICAL ANALYSIS

Given our dataset, consisting of 572 samples and encompassing 5 latent variables with their corresponding items, the utilization of partial least squares (PLS) is deemed a suitable analytical approach, following the recommendation of [50]. PLS-SEM is particularly well-suited for scenarios with limited sample sizes, enabling the prediction of multidimensional constructs and the simultaneous examination of both structural and measurement models, as emphasized by [50]. Additionally, PLS-SEM proves effective in handling non-normally distributed data. This selection is further supported by the observation that the p-values associated with Mardia's multivariate skewness and kurtosis, as reported by [50], were all below 0.001.

B. COMMON BIAS METHOD

Due to the cross-sectional nature, this attempt took precautionary measures to evaluate the potential presence of common technique bias. The task was accomplished by utilizing both procedural and statistical methodologies, adhering to the guidelines proposed by [50] and [64]. We educated the participants in a step-by-

step way that there were no definite right or wrong answers while highlighting the need to keep their comments confidential and anonymous. To assess the existence of common technique bias, we employed Harman's single-factor analysis. This investigation revealed that a solitary element accounted for a mere 21.46% of the overall variability. To further substantiate the absence of common procedure bias, we conducted a comprehensive collinearity test utilizing a randomly chosen dependent variable. The highest value of the variance inflation factor (VIF) obtained was just 1.3982%, which is much below the normal threshold of 3.3% established by [40]. These findings suggest that the data was not significantly influenced by common method bias.

C. ASSESSING MEASUREMENT MODEL

Assessing the reliability and validity of constructs is crucial when analyzing the measurement model, employing the methodology proposed by [32]. We assessed the dependability of the concept by utilizing two indicators: composite reliability (CR) and Dijkstra-rho Henseler's (rho_A), as recommended by [17] and [77]. Previous studies have shown that when the values of CR and rho_A are above 0.7, it indicates a high level of reliability. Based on the data provided in Table 4, the CR and rho_A values ranged from 0.7990 to 0.8979, surpassing the threshold of 0.7 for both indices.

Furthermore, we employed the average variance extracted (AVE) criterion, as suggested by [72], to confirm convergent validity. According to [32], it is widely anticipated that the average variance extracted (AVE) values should exceed 0.5. All factor loadings above a threshold of 0.70, which is noteworthy. In summary, the results validated the consensus among all fundamental principles. In addition, we evaluated the discriminant validity using Heterotrait-Monotrait (HTMT) scores and HTMT inference correlation ratios, as recommended by [32]. Additionally, this study demonstrated that by employing HTMT inference with 5000 bootstrapping samples, both the lower and upper bounds of the 99% confidence interval were found to be less than one, as suggested by Ooi et. al., (2020). This discovery provided evidence that each variable was statistically distinct from the others, therefore confirming discriminant validity, consistent with the findings of [76].

Table 4. *Correlations and discriminant validity.*

Source: own elaboration

	ATT	**Intention**	**PEU**	**PU**	**TS**
ATT	1.000				
Intention	0.580				
PEU	0.538	0.598			
PU	0.576	0.695	0.553		
TS	0.065	0.133	0.117	0.112	1.000

Note: ***p < 0.01; **p < 0.05; **p < 0.1

Table 5. *Reliability and Convergent validity*

Source: own elaboration

Constructs	**Items**	**Convergent validity**			**Internal consistency reliability**		
		Outer loading	**AVE**	**VIF**	**Cronbach's alpha**	**Dijkstra-Henseler's (rho_A)**	**Composite reliability CR**
PEU	PEU1	0.8394		1.9965			
	PEU2	0.7998		1.7162			
	PEU3	0.8522		1.9857			
	PEU4	0.8240	0.6874	1.9884	0.8487	0.8553	0.8979
PU	PU1	0.8061		1.6322			
	PU2	0.8178		1.7339			
	PU3	0.7810		1.5709			
	PU4	0.7743	0.6320	1.6078	0.8060	0.8089	0.8729
ATT	ATT1	0.8410		1.7411			
	ATT2	0.8492		1.6574			
	ATT3	0.8406	0.7117	1.7072	0.7978	0.7999	0.8810

TS	TS1	0.7911		1.3982			
	TS2	0.9395	0.7542	1.3982	0.6959	0.8602	0.8590
Intention	Intention 1	0.8270		1.6707			
	Intention 2	0.8138		1.5784			
	Intention 3	0.8691	0.7005	1.7115	0.7871	0.7990	0.8752

Table 6. *HTMT Assessment*

Source: own elaboration

	ATT	**Intention**	**PEU**	**PU**	**TS**	**TS x PEU**	**TS x PU**
ATT	1.000						
Intention	0.580						
PEU	0.538	0.598					
PU	0.576	0.695	0.553				
TS	0.065	0.133	0.117	0.112			
TS x PEU	0.053	0.086	0.047	0.012	0.041		
TS x PU	0.070	0.067	0.042	0.061	0.047	0.404	1.000

The inferential statistics were calculated using the bootstrapping technique, which involved generating 5,000 subsamples. The analysis did not involve any sign changes and utilized bias-corrected confidence intervals with a 95 percent level of certainty. The results of the testing are shown in Figure 2 and Table 6. All factors, including perceived utility (β= 0.0475, p 0.000), and perceived ease of use (β = 0.0486, p 0.000), have a notable impact on attitude towards Moodle. Simultaneously, there was a notable correlation between attitude and the desire to adopt Moodle (β =0.0364, p 0.000). Thus, the tested hypotheses (H1, H2, H3) were confirmed. In addition, it has been found that technical support has a substantial moderating influence on the relationship between perceived usefulness, perceived ease of use, and the desire to adopt Moodle at HUFLIT University. This effect is indicated by the respective values of β = 0.0589 (p < 0.000) and β = 0.0555 (p < 0.000). This issue provides evidence supporting hypotheses H4a and H4b.

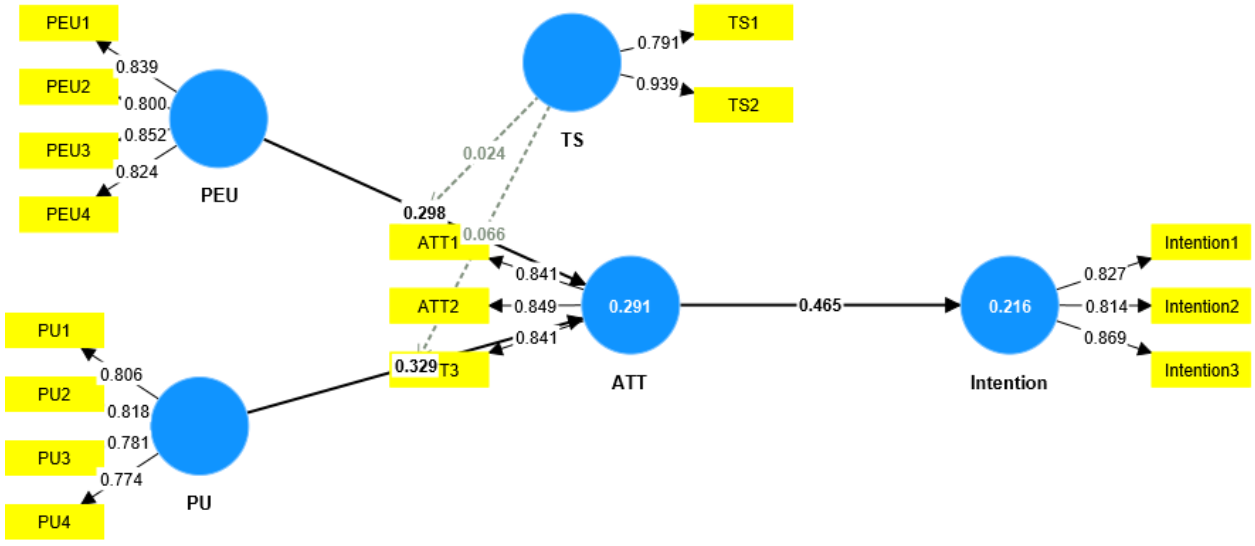

Figure 2. *Structural Model*

Source: own elaboration

Table 8. *Structural Model*

Source: own elaboration

Hypothesis	PLS Path	Path coefficients	STDEV	T – statistic	P- value	2.50%	97.50%	Remarks
H1	Perceived ease of use -> Attitude toward Moodle	0.2976	0.0475	6.2591	0.0000	0.2042	0.3900	Significant
H2	Perceived usefulness -> Attitude toward Moodle	0.3285	0.0486	6.7613	0.0000	0.2343	0.4264	Significant
H3	Attitude -> Intention	0.4647	0.0364	12.7807	0.0000	0.3947	0.5369	Significant
H4a	Technical support x perceived usefulness -> Attitude	0.0665	0.0589	1.1276	0.2595	-0.0759	0.1606	Significant
H4b	Technical support x perceived ease of use -> Attitude	0.0241	0.0555	0.4345	0.6640	-0.0814	0.1375	Significant

The determination coefficient is a step in the structural model evaluation procedure that employs an R2 value to evaluate the model's predictive ability. ATT (0.831) and ITT (0.856) both had high prediction accuracy (Cohen, 1992). Then, we utilized PLSpredict in SmartPLS 4.0 with 10 folds and 10 repetitions to assess the out-of-sample predictive ability of Q2. For endogenous variables, the range of Q2 for ATT and ITT was consecutively 0.317 and 0.274, which was greater than zero (Hair et. al., 2017). Therefore, the model's predictive ability was adequate (Shmueli et. al., 2019).

Table 9. *Rsquare, Q^2 predict and RMSE.*

Source: own elaboration

	Q^2predict	R-square
ATT	0.2668	0.2843
Intention	0.2416	0.2146

V. RESULTS AND DISCUSSIONS

This study offers crucial insights into Elearning for users. E-learning is a revolutionary power in contemporary education, providing adaptable, reachable, and individualized learning prospects for both students and professionals. E-learning overcomes geographical and temporal limitations, allowing learners to access top-notch educational resources and courses regardless of their location or the time of day. This adaptability accommodates a wide range of learning preferences and speeds, meeting individual requirements and promoting continuous learning throughout one's life. E-learning platforms such as Moodle offer dynamic and captivating materials, such as movies, quizzes, and discussion boards, which improve understanding and memory recall. Moreover, E-learning facilitates ongoing professional growth by enabling individuals to acquire new skills or update existing ones in order to meet changing industry requirements. Through the incorporation of technology in education, E-learning not only enhances the availability of information but also equips learners with the necessary skills for the digital era, resulting in a more comprehensive and interactive learning setting.

Research provides evidence for the significance of e-learning systems such as Moodle in improving educational experiences. The findings are consistent with [2]; [8] emphasized the role of learning management systems (LMS) such as Moodle in facilitating interactive online environments that efficiently deliver educational content and report learner outcomes. This aligns with the concept of e-learning platforms providing captivating content.

Moreover, this study confirms the significant importance of perceived usefulness and perceived ease of use with attitude then consequently affects to intention to adopt Moodle. Users' sentiments regarding the platform are substantially influenced by their perceived usefulness and perceived ease of use of Moodle. Users' perception of Moodle as a helpful tool that improves their learning or teaching experience, along with its user-friendly navigation and operation, leads to a more favorable attitude towards using Moodle. This optimistic mindset is of utmost importance as it immediately influences their determination to embrace Moodle as their main learning management system. An intuitive and efficient platform encourages

users to incorporate it into their everyday routines, resulting in increased engagement and utilization. This research is consistent with [77]; [52]; and [47] which strengthens the notion that perceived usefulness has a direct influence on their attitude and intention to utilize these platforms. By cultivating the perception of Moodle as a valuable and user-friendly tool, educational institutions can enhance student and teacher engagement and utilization, resulting in higher returns on investments in e-learning platforms.

Furthermore, this research sheds light on the pivotal role of attitude toward intention to adopt Moodle at HUFLIT University. Specifically, the attitude significantly impacts their inclination to embrace Moodle, a highly popular learning management system. Users, including students, instructors, and administrators, who have a good attitude toward Moodle are more likely to adopt and efficiently utilize its capabilities. The favorable outlook is frequently based on the acknowledgment of the platform's benefits, including its intuitive design, comprehensive collaboration features, and strong support for diverse educational tasks. A positive disposition not only enhances users' drive and eagerness to include Moodle in their instructional methods but also has a cascading impact on peers and colleagues, building a supportive community that encourages wider adoption and utilization of the platform. Hence, it is crucial to cultivate a favorable mindset towards Moodle, as it has a substantial impact on the probability of its acceptance, guaranteeing that the educational advantages of the platform are effectively utilized at various institutions. This finding is repeatedly from [79], [5], and [45] which demonstrate the significance of attitudes in the process of adoption, stating that attitudes play a vital role in determining intention and subsequent action.

Last but not least, this attempt emphasizes the pivotal role of technical support in the nexus between perceived usefulness and perceived ease of use with attitude. The more technical support gathered from the University, the more positive attitude toward Moodle so that users have more inclination to adopt Moodle for their learning. The provision of technical support plays a vital role in shaping users' perceptions of platforms such as Moodle. It strengthens the connection between perceived usefulness, perceived ease of use, and the overall user experience. Efficient technical assistance is necessary for rapidly resolving users' issues, thereby reducing frustration and unfavorable encounters. Technical support plays a crucial role in ensuring that users can effectively employ all the features of the platform, hence strengthening the perceived value of the system. Furthermore, the presence of assistance contributes to a more user-friendly platform, hence increasing the perceived simplicity of utilization. The good opinions of Moodle held by users contribute to a more favorable attitude towards the platform. When users feel competent and have access to strong technical help, they are more likely to effectively navigate and utilize the platform, resulting in increased rates of adoption and continued usage.

Previous attempts provide evidence for the importance of technical support in influencing users' perceptions and attitudes towards the adoption of technology. [34] discovered that there is a direct correlation between managerial support and perceived usefulness. This emphasizes the significance of support mechanisms in improving the adoption of a system. In addition, [44] and [29] highlighted that technical assistance plays a crucial role in influencing the perceived usefulness and perceived ease of use of e-learning systems. In addition, [62] established that technical support has a direct impact on the perception of how easy a system is to use and how beneficial it is, highlighting its importance in promoting the acceptance of the system.

In a nutshell, this study highlights the crucial need for implementing Moodle in the University. Increased perceived usefulness, perceived ease of use, and technical support will boost the motivation to utilize Moodle at the University. Thus, it is imperative for the faculties and managers at HUFLIT University to prioritize enhancing user satisfaction. With a particular emphasis on technical assistance, which encompasses round-the-clock hotline services, email assistance, and the potential utilization of a chatbot, the University aims to provide optimal ease and interactivity for users.

VI. CONCLUSIONS AND LIMITATIONS

This study has found several novelty results in the context of adopting Moodle at HUFLIT University. This study provides essential perspectives on Elearning for users. E-learning is a transformative force in modern education, offering flexible, accessible, and personalized learning opportunities for students and professionals alike. E-learning transcends geographical and temporal constraints, enabling learners to effortlessly access high-quality educational resources and courses irrespective of their geographic location or the time of day. This flexibility caters to a diverse range of learning preferences and paces, fulfilling individual needs and fostering lifelong learning. E-learning platforms like Moodle include engaging and interactive resources, such as videos, quizzes, and forums, that enhance comprehension and retention. Additionally, E-learning supports continuous professional development by allowing individuals to gain new skills or upgrade old ones to suit evolving market demands. By integrating technology into education, E-learning not only increases the accessibility of knowledge but also provides learners with the essential skills for the digital age, leading to a more comprehensive and dynamic learning environment. This study sheds light on the pivotal role of technical assistance in enhancing the adoption of Elearning through students. Specifically, technical support should include 24/7 assistance and email support. Meanwhile, the Facutlies as well as Managers need to investigate the infrastructure, and interesting and helpful content on Elearning. An interesting emphasis is engaging freshmen to interact and participate actively through Moodle. The faculties, as well as the IT Department, should establish handbook guidelines, and online meetings for freshmen to guide them on how to utilize the function through Moodle. Meanwhile, the contents and infrastructure from Moodle should be equipped usefully and interestingly for convenience as well as increasing interactivity to engage more attention from users. Moreover, this attempt predominantly concentrates on HUFLIT University, this study should widen more samples to provide full insight pictures toward the Elearning at Ho Chi Minh City perspective.

VII. ACKNOWLEDGEMENTS

WE ARE EXTREMELY GRATEFUL TO ALL REVIEWERS FOR THEIR INSIGHTFUL AND CONSTRUCTIVE FEEDBACK, WHICH HELPED US ENHANCE THIS PAPER.

VIII. REFERENCES

[1] Abbad, M. (2021), Using the UTAUT model to understand students' usage of e-learning systems in developing countries. *Education and Information Technologies*, 26(6), 7205-7224. https://doi.org/10.1007/s10639-021-10573-5

[2] Abdullah, F. and Ward, R. (2016), Developing a general extended technology acceptance model for e-learning (getamel) by analysing commonly used external factors. *Computers in Human Behavior*, 56, 238-256. https://doi.org/10.1016/j.chb.2015.11.036

[3] Ahn, M., Kang, J., & Hustvedt, G. (2015), A model of sustainable household technology acceptance. *International Journal of Consumer Studies*, 40(1), 83-91. https://doi.org/10.1111/ijcs.12217

[4] Alyoussef, I. Y. (2021), E-learning acceptance: the role of task–technology fit as sustainability in higher education. *Sustainability*, 13(11), 6450. https://doi.org/10.3390/su13116450

[5] Aikina, T. Y. and Bolsunovskaya, L. (2020), Moodle-based learning: motivating and demotivating factors. *International Journal of Emerging Technologies in Learning (iJET)*, 15(02), 239. https://doi.org/10.3991/ijet.v15i02.11297

[6] Al-Mamary, Y. and Shamsuddin, A. (2015), Testing of the technology acceptance model in context of yemen. *Mediterranean Journal of Social Sciences*. https://doi.org/10.5901/mjss.2015.v6n4s1p268

[7] Asmarina, N., Yasa, N., & Ekawati, N. (2022), Role of satisfaction in mediating the effect of perceived ease of use and perceived usefulness on purchase intention. *International Research Journal of Management It and Social Sciences*, 9(5), 690-706. https://doi.org/10.21744/irjmis.v9n5.2164

[8] Bauer, T., Immitzer, M., Mansberger, R., Vuolo, F., Márkus, B., Wojtaszek, M., … & Mozumder, C. (2021), The making of a joint e-learning platform for remote sensing education: experiences and lessons learned. *Remote Sensing*, 13(9), 1718. https://doi.org/10.3390/rs13091718

[9] Bello, Z., Bhatti, M. A., & Pangil, F. (2017), An examination of the factors affecting the adoption of e-training in the nigerian civil service sector. *Global Business and Organizational Excellence*, 36(4), 33-42. https://doi.org/10.1002/joe.21788

[10] Brasier, A. and Wan, G. (2010), Including subjective norm and technology trust in the technology acceptance model. *Acm Sigmis Database the Database for Advances in Information Systems*, 41(4), 40-51. https://doi.org/10.1145/1899639.1899642

[11] Bregenzer, A. and Jiménez, P. (2021), Risk factors and leadership in a digitalized working world and their effects on employees' stress and resources: web-based questionnaire study. *Journal of Medical Internet Research*, 23(3), e24906. https://doi.org/10.2196/24906

[12] Boonstra, A. and Broekhuis, M. (2010), Barriers to the acceptance of electronic medical records by physicians from systematic review to taxonomy and interventions. *BMC Health Services Research*, 10(1). https://doi.org/10.1186/1472-6963-10-231

[13] Bouwhuis, D., Meesters, L., & Berentsen, J. (2008), Technology acceptance models in gerontechnology. *Gerontechnology*, 7(2). https://doi.org/10.4017/gt.2008.07.02.015.00

[14] Castillo-Vergara, M., Álvarez-Marín, A., Pinto, E. V., & Valdez-Juárez, L. E. (2022), Technological acceptance of industry 4.0 by students from rural areas. *Electronics*, 11(14), 2109. https://doi.org/10.3390/electronics11142109

[15] Chawinga WD, Zozie PA (2016), Increasing access to higher education through open and distance learning: Empirical findings from Mzuzu University, Malawi. *The International Review of Research in Open and Distributed Learning* 17(4). Available at: www.irrodl.org/index.php/irrodl/article/view/2409 (accessed 3 October 2019).

[16] Chittoo, H. B. and Dhotah, R. (2016), Electronic tax filing in Mauritius: insights into factors leading to technology adoption. *IOSR Journal of Humanities and Social Science*, 21(08), 34-38. https://doi.org/10.9790/0837-2108083438

[17] Chong, X., Zhang, J., Lai, K. K., & Nie, L. (2012). An empirical analysis of mobile internet acceptance from a value–based view. International Journal of Mobile Communications, 10(5), 536-557.

[18] Colvin, C. and Goh, A. (2005), Validation of the technology acceptance model for police. *Journal of Criminal Justice*, 33(1), 89-95. https://doi.org/10.1016/j.jcrimjus.2004.10.009

[19] Dalvi-Esfahani, M., Leong, L. W., Ibrahim, O., & Nilashi, M. (2018), Explaining students' continuance intention to use mobile web 2.0 learning and their perceived learning: an integrated approach. *Journal of Educational Computing Research*, 57(8), 1956-2005. https://doi.org/10.1177/0735633118805211

[20] Daniel J (2014), Foreword to the special section on massive open online courses MOOCs – Evolution or revolution?. *Studies in Higher Education*, p. 9. Available at: http://jolt.merlot.org/vol10no1/daniel_foreword_0314.pdf (accessed 3 October 2019).

[21] Davis, F. D. (1989), Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319. https://doi.org/10.2307/249008

[22] Dubey, P. and Sahu, K. (2021), Students' perceived benefits, adoption intention and satisfaction to technology-enhanced learning: examining the relationships. *Journal of Research in Innovative Teaching & Learning*, 14(3), 310-328. https://doi.org/10.1108/jrit-01-2021-0008

[23] Fabrigar, L. R., Petty, R. E., Smith, S. M., & Crites, S. L. (2006), Understanding knowledge effects on attitude-behavior consistency: the role of relevance, complexity, and amount of knowledge. *Journal of Personality and Social Psychology*, 90(4), 556-577. https://doi.org/10.1037/0022-3514.90.4.556

[24] Fahim, M., Motallebzadeh, K., & Sazegar, Z. (2011), The effect of e-mailing on vocabulary retention of Iranian lower intermediate EFL learners. *Journal of Language Teaching and Research*, 2(6). https://doi.org/10.4304/jltr.2.6.1385-1391

[25] Fang, Y.H. (2019), An app a day keeps a customer connected: explicating loyalty to brands and branded applications through the lens of affordance and service-dominant logic. *Inf. Manag*. 56 (3), 377–391

[26] Goldhaber, A. B. (2021), Impact of ICT integration on quality of education among secondary schools in the USA. *Journal of Education*, 4(6), 53-61. https://doi.org/10.53819/81018102t5015

[27] Goh, W., Hong, J., & Gunawan, W. (2013), Exploring students' perceptions of learning management system: an empirical study based on TAM. https://doi.org/10.1109/tale.2013.6654463

[28] Guðmundsdóttir, G. and Hatlevik, O. (2017), Newly qualified teachers' professional digital competence: implications for teacher education. *European Journal of Teacher Education*, 41(2), 214-231. https://doi.org/10.1080/02619768.2017.1416085

[29] Guriting, P. and Ndubisi, N. O. (2006), Borneo online banking: evaluating customer perceptions and behavioural intention. *Management Research News*, 29(1/2), 6-15. https://doi.org/10.1108/01409170610645402

[30] Halim, A., Mahzum, E., Yacob, M., Irwandi, I., & Halim, L. (2021), The impact of narrative feedback, e-learning modules and realistic video and the reduction of misconception. *Education Sciences*, 11(4), 158. https://doi.org/10.3390/educsci11040158

[31] Halim, N. D. A., Hong, O. A., Zulkifli, N. N., Jumaat, N. F., Zaid, N. M., & Mokhtar, M. (2022), Designing a game-based learning kit with integration of augmented reality for learning geography. *International Journal of Interactive Mobile Technologies (iJIM)*, 16(02), 4-16. https://doi.org/10.3991/ijim.v16i02.27377

[32] Hair, J.F., Hult, G.T.M., Ringle, C.M. and Sarstedt, M. (2017) A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM). 2nd Edition, Sage Publications Inc., Thousand Oaks, CA.

[33] Hong, X., Zhang, M., & Liu, Q. (2021). Preschool teachers' technology acceptance during the covid-19: an adapted technology acceptance model. Frontiers in Psychology, 12. https://doi.org/10.3389/fpsyg.2021.691492

[34] Igbaria, M., Zinatelli, N., Cragg, P. B., & Cavaye, A. L. M. (1997), Personal computing acceptance factors in small firms: a structural equation model. *MIS Quarterly*, 21(3), 279. https://doi.org/10.2307/249498

[35] Islam, A. K. M. N. (2012). The role of perceived system quality as educators' motivation to continue e-learning system use. *AIS Transactions on Human-Computer Interaction*, 4(1), 25-43. https://doi.org/10.17705/1thci.00037

[36] Kafley, G. and Chandrasekaran, M. (2021), A study on users' adoption of electronic payment system in India. *Turkish Journal of Computer and Mathematics Education (Turcomat)*, 12(6), 2642-2649. https://doi.org/10.17762/turcomat.v12i6.5764

[37] Karishma, K. and Raghuwaiya, K. (2023), Factors affecting interaction on Moodle: an empirical study based on tam., 547-556. https://doi.org/10.1007/978-981-19-9228-5_46

[38] Klašnja-Milićević, A., Ivanović, M., & Νανόπουλος, A. (2015), Recommended systems in e-learning environments: a survey of the state-of-the-art and possible extensions. *Artificial Intelligence Review*, 44(4), 571-604. https://doi.org/10.1007/s10462-015-9440-z

[39] Khan, S. and Emara, S. A. A. (2018), Effect of technology use in education. *International Journal of Pedagogical Innovations*, 6(2), 141-149. https://doi.org/10.12785/ijpi/060202

[40] Kock, Ned and Lynn, Gary S. (2012) "Lateral Collinearity and Misleading Results in Variance-Based SEM: An Illustration and Recommendations," Journal of the Association for Information Systems, 13(7),. DOI: 10.17705/1jais.00302

[41] Legramante, D., Azevedo, A., & Azevedo, J. M. (2023), Integration of the technology acceptance model and the information systems success model in the analysis of Moodle's satisfaction and continuity of use. *The International Journal of Information and Learning Technology*, 40(5), 467-484. https://doi.org/10.1108/ijilt-12-2022-0231

[42] Maniva, S. J. C. d. F., Carvalho, Z. M. d. F., Gomes, R. K. G., Carvalho, R. E. F. L. d., Ximenes, L. B., & Freitas, C. H. A. d. (2018), Educational technologies for health education on stroke: an integrative review. *Revista Brasileira De Enfermagem*, 71(suppl 4), 1724-1731. https://doi.org/10.1590/0034-7167-2017-0041

[43] Mardhiah, A., Farisha, N., Yuan, W. P., & Tony, F. N. (2022), Investigating the influence of perceived ease of use and perceived usefulness on housekeeping technology intention to use. *International Journal of Academic Research in Business and Social Sciences*, 12(11). https://doi.org/10.6007/ijarbss/v12-i11/15657

[44] Mensah, I. K., Zeng, G., Luo, C., Lu, M., & Xiao, Z. (2022), Exploring the e-learning adoption intentions of college students amidst the COVID-19 epidemic outbreak in China. *SAGE Open*, 12(2), 215824402210866. https://doi.org/10.1177/21582440221086629

[45] Merchant, S. (2007), Exploring the influence of cultural values on the acceptance of information technology: an application of the technology acceptance model. https://doi.org/10.28945/3117 Mohanty, J. (2013), Attitudes toward adoption in Singapore. *Journal of Family Issues*, 35(5), 705-728. https://doi.org/10.1177/0192513x13500962

[46] Moreno, V., Cavazotte, F., & Alves, I. (2016), Explaining university students' effective use of e-learning platforms. *British Journal of Educational Technology*, 48(4), 995-1009. https://doi.org/10.1111/bjet.12469

[47] Mtebe, J. S. (2019), Examining user experience of e-learning systems implemented in two universities in Tanzania. *Interactive Technology and Smart Education*, 17(1), 39-55. https://doi.org/10.1108/itse-05-2019-0025

[48] Neumann, K. and Waight, N. (2020), The digitalization of science education: déjà vu all over again? *Journal of Research in Science Teaching*, 57(9), 1519-1528. https://doi.org/10.1002/tea.21668

[49] O'Connor, K., & Larkin, L. (2019). Making a better student learning experience for virtual learning environment users. International Journal for Digital Society, 10, 1489-1496.

[50] Ooi, K. B., & Tan, G. W. H. (2016), Mobile technology acceptance model: An investigation using mobile users to explore smartphone credit cards. *Expert Systems with Applications*, 59, 33-46.

[51] Ooko, M. (2020), Open, distance, and e-learning education in Kenya. *The Education Systems of Africa*, 1-11. https://doi.org/10.1007/978-3-030-43042-9_38-1

[52] Orfanou, K., Τσέλιος, N., & Katsanos, C. (2015), Perceived usability evaluation of learning management systems: empirical evaluation of the system usability scale. *The International Review of Research in Open and Distributed Learning*, 16(2). https://doi.org/10.19173/irrodl.v16i2.1955

[53] Owusu-Bempah, E., Opoku, D., & Sam-Mensah, R. (2022), Gender differences in e-learning success in a developing country context: a multi-group analysis. *European Journal of Education and Pedagogy*, 3(4), 61-69. https://doi.org/10.24018/ejedu.2022.3.4.410

[54] Panda, S. and Mishra, S. (2007), E-learning in a mega open university: faculty attitude, barriers and motivators. *Educational Media International*, 44(4), 323-338. https://doi.org/10.1080/09523980701680854

[55] Prajapati, V. and Singh, A. (2018), Promoting constructivist integration of technology through webquest. *Journal of National Development*, 31(2), 103-114. https://doi.org/10.29070/31/58290

[56] Quansah, R. (2021), The use of learning management system (LMS) Moodle in the midst of covid-19 pandemic: students' perspective. *Journal of Educational Technology and Online Learning*, 4(3), 418-431. https://doi.org/10.31681/jetol.934730

[57] Quynh, N. and Phuong, T. (2021), The disadvantages of learning listening via Moodle at Van Lang University. https://doi.org/10.2991/assehr.k.211224.019

[58] Reeder, B., Revere, D., Olson, D. R., & Lober, W. B. (2011). Perceived usefulness of a distributed community-based syndromic surveillance system: a pilot qualitative evaluation study. *BMC Research Notes*, 4(1). https://doi.org/10.1186/1756-0500-4-187

[59] Rice, R.E., Evans, S.K., Pearce, K.E., Sivunen, A., Vitak, J., Treem, J.W (2017), Organizational media affordances: operationalization and associations with media use. *J. Commun*. 67 (1), 106–130

[60] Rivers, D. J. (2021), The role of personality traits and online academic self-efficacy in acceptance, actual use and achievement in Moodle. *Education and Information Technologies*, 26(4), 4353-4378. https://doi.org/10.1007/s10639-021-10478-3

[61] Safeena, R., Date, H., Hundewale, N., & Kammani, A. (2013). Combination of TAM and TPB in Internet Banking Adoption. International Journal of Computer Theory and Engineering, 5, 146-150. https://doi.org/10.7763/IJCTE.2013.V5.665

[62] Sánchez, R. and Hueros, A. (2010), Motivational factors that influence the acceptance of moodle using TAM. *Computers in Human Behavior*, 26(6), 1632-1640. https://doi.org/10.1016/j.chb.2010.06.011

[63] Sangrà, A., Vlachopoulos, D., & Lanzo, N. C. (2012), Building an inclusive definition of e-learning: an approach to the conceptual framework. *The International Review of Research in Open and Distributed Learning*, 13(2), 145. https://doi.org/10.19173/irrodl.v13i2.1161

[64] Sangwon Lee, Edson C. Tandoc, Edmund W.J. Lee. (2023), social media may hinder learning about science; social media's role in learning about COVID-19. *Computers in Human Behavior*, Volume 138, 107487, ISSN 0747-5632, https://doi.org/10.1016/j.chb.2022.107487

[65] Sarmah, S. S. (2018). Understanding Blockchain Technology. Computer Science and Engineering, 8, 23-29. http://article.sapub.org/10.5923.j.computer.20180802.02.html

[66] Sasmita, Ida & Piartrini, Putu. (2019). Effect of job attitude, subjective norm and perceived behavior control on employee intention to quit. International research journal of management, IT and social sciences. 6. 89-94. 10.21744/irjmis.v6n5.702.

[67] Shah, R. and Barkas, L. A. (2018), Analyzing the impact of e-learning technology on students' engagement, attendance and performance. *Research in Learning Technology*, 26(0). https://doi.org/10.25304/rlt.v26.2070

[68] Sinclair, J. and Aho, A. (2016), Investigating the experience of Moodle adoption through expert voices., 90-102. https://doi.org/10.1007/978-3-319-42147-6_8

[69] S. Taylor, P.A. Todd (1995), Understanding information technology usage: a test of competing models, Inf. Syst. Res. 6 (2) 144–176.

[70] Suhud, U., Budak, T., & Benk, S. (2020), Antecedents of e-money adoption intention among Indonesian and Turkish consumers. *Management Science Letters*, 609-616. https://doi.org/10.5267/j.msl.2019.9.019

[71] Suppan, L., Stuby, L., Gartner, B., Larribau, R., Iten, A., Abbas, M., … & Suppan, M. (2020), Impact of an e-learning module on personal protective equipment knowledge in student paramedics: a randomized controlled trial. *Antimicrobial Resistance &Amp; Infection Control*, 9(1). https://doi.org/10.1186/s13756-020-00849-9

[72] Susan Lew, Garry Wei-Han Tan, Xiu-Ming Loh, Jun-Jie Hew, Keng-Boon Ooi, The disruptive mobile wallet in the hospitality industry: An extended mobile technology acceptance model, Technology in Society, Volume 63, 2020, 101430, ISSN 0160-791X, https://doi.org/10.1016/j.techsoc.2020.101430.

[73] Stephanie Hui-Wen Chuah, Philipp A. Rauschnabel, Nina Krey, Bang Nguyen, Thurasamy Ramayah, Shwetak Lade, Wearable technologies: The role of usefulness and visibility in smartwatch adoption, Computers in Human Behavior, Volume 65, 2016, Pages 276-284, ISSN 0747-5632, https://doi.org/10.1016/j.chb.2016.07.047

[74] Taamneh, A., Alsaad, A., Elrehail, H., Al-Okaily, M., Lutfi, A., & Sergio, R. P. (2022), University lecturers acceptance of Moodle platform in the context of the covid-19 pandemic. *Global Knowledge, Memory and Communication*, 72(6/7), 666-684. https://doi.org/10.1108/gkmc-05-2021-0087

[75] Tan, G. W. H., & Ooi, K. B. (2018). Gender and age: do they really moderate mobile tourism shopping behavior?. Telematics and Informatics, 35(6), 1617-1642.

[76] Tesser, A. and Shaffer, D. R. (1990), Attitudes and attitude change. *Annual Review of Psychology*, 41(1), 479-523. https://doi.org/10.1146/annurev.ps.41.020190.002403

[77] Teo, T. (2015). Comparing pre-service and in-service teachers' acceptance of technology: Assessment of measurement invariance and latent mean differences. Computers & Education, 83, 22-31.

[78] Venkatesh, V. and Davis, F. (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

[79] Webb, L., Clough, J., O'Reilly, D., Wilmott, D., & Witham, G. (2017), The utility and impact of information communication technology (ICT) for pre-registration nurse education: a narrative synthesis systematic review. Nurse Education Today, 48, 160-171. https://doi.org/10.1016/j.nedt.2016.10.007

[80] Yeou, M. (2016), An investigation of students' acceptance of Moodle in a blended learning setting using technology acceptance model. *Journal of Educational Technology Systems*, 44(3), 300-318. https://doi.org/10.1177/0047239515618464

[81] Ying, Y., Mohamad, M., & Nasir, M. (2022), Students' acceptance of using cidos 3.5 for learning communicative English during the covid-19 pandemic. *Journal of Language Teaching and Research*, 13(5), 956-964. https://doi.org/10.17507/jltr.1305.07

[82] Zhao, S. and Song, J. (2021), What kind of support do teachers really need in a blended learning context?. *Australasian Journal of Educational Technology*, 116-129. https://doi.org/10.14742/ajet.6592

Website:

[1] Moodle (2023). Retrived from https://moodle.org/?lang=vi on December 2023.

MỞ KHÓA TIỀM NĂNG: KHÁM PHÁ CON ĐƯỜNG TĂNG CƯỜNG SỰ THAM GIA CỦA SINH VIÊN VÀO M-LEARNING THÔNG QUA NỀN TẢNG MOODLE TẠI ĐẠI HỌC HUFLIT

Tóm tắt— Nghiên cứu này nhằm kiểm tra các yếu tố ảnh hưởng đến ý định sử dụng Moodle tại Đại học HUFLIT. Cả hai yếu tố nhận thức về tính hữu ích và nhận thức về sự dễ dàng trong sử dụng đều có tác động tích cực đến thái độ của sinh viên, khiến họ có xu hướng sử dụng Moodle nhiều hơn. Đồng thời, khi sinh viên cảm nhận được sự hỗ trợ kỹ thuật cao từ các phòng ban IT cũng như từ các khoa và trường liên quan, họ sẽ cảm thấy dễ dàng hơn trong việc sử dụng thường xuyên. Ngoài ra, hỗ trợ kỹ thuật đóng vai trò quan trọng trong việc thúc đẩy sự chấp nhận học trực tuyến. Sử dụng phương pháp PLS-SEM với mẫu gồm 572 sinh viên từ Đại học HUFLIT, nghiên cứu này khẳng định tầm quan trọng của nền tảng Moodle tại HUFLIT. Nghiên cứu này nêu bật vai trò quan trọng của học trực tuyến đối với tất cả các bên liên quan trong giáo dục. Học trực tuyến là yếu tố chủ chốt trong đổi mới giáo dục hiện đại, mang lại các lựa chọn học tập linh hoạt, dễ tiếp cận và được cá nhân hóa cho sinh viên và giảng viên. Moodle cải thiện giáo dục bằng cách cung cấp nền tảng linh hoạt, dễ tiếp cận để sinh viên có thể truy cập tài liệu, nộp bài và tham gia thảo luận. Đối với giảng viên, nó đơn giản hóa việc quản lý khóa học, phân phối nội dung và giao tiếp. Các tính năng tùy chỉnh của Moodle hỗ trợ nhiều phương pháp giảng dạy khác nhau, thúc đẩy môi trường học tập hợp tác và hiệu quả.

Từ khóa— Moodle, Học trực tuyến, Mô hình cấu trúc tuyến tính từng phần, linh hoạt, dễ tiếp cận

Ms. Hang Dang Thi Thu has been working at the Finance – Economics Department of HUFLIT University. She has been working in the educational sector for nearly 15 years. She is also a PhD candidate at UCSI University. Her research focuses on financial behavior, capital structure, and new technologies that aim to bring value to the financial industry as well as provide advanced solutions for businesses in the context of rapidly changing technology.

Contact information.
Author: Hang Dang Thi Thu
Organization / University, Faculty: Ho Chi Minh City of Foreign Languages, and Information Technology University
Address of organization/university, faculty: 32 Truong Son, Tan Binh District, Ho Chi Minh City
E-mail: hangdtt@huflit.edu.vn
Phone number: +84.937.170.950
ORCID: 0000-0002-0295-7725

Dr. Hoang Duc Sinh is currently a lecturer in the Marketing Department of the Faculty of Business Administration at the International University - Vietnam National University, Ho Chi Minh City, with research published in prestigious journals in the Web of Science and Scopus systems. His main research focuses on customer behavior and new technologies, aiming to contribute to the development of the Marketing industry as well as provide advanced solutions for businesses in the context of rapidly changing technology.

Contact information
Author: Sinh Hoang Duc
Organization / University, Faculty: International University, National University of Vietnam.
Address of organization/university, faculty: Quarter 6, Linh Trung Ward, Thu Duc District, HCM City, Vietnam
E-mail: hdsinh@hcmiu.edu.vn