

Determinants That Influence The Behavior of Using Hybrid Learning in Tourism Department of Politeknik Negeri Bali

*I Made Budiasa
Tourism Departement
Politeknik Negeri Bali
Denpasar, Indonesia
madebudiasa@pnb.ac.id

I Ketut Suparta
Tourism Departement
Politeknik Negeri Bali
Denpasar, Indonesia
ktutsuparta@pnb.ac.id

Nyoman Mastiani Nadra
Tourism Departement
Politeknik Negeri Bali
Denpasar, Indonesia
mastianinadra@pnb.ac.id

Abstract— The purpose of this study was to determine the determinants that affect the Behavior of Using Hybrid Learning (HL) in tourism learning at the Tourism Department of Politeknik Negeri Bali. The research method used is a survey method using a questionnaire with Google form to 70 lecturers who use HL in tourism learning at the Department of Tourism of the Politeknik Negeri Bali. The sample was taken purposively from lecturers. Primary data analysis was carried out quantitatively with the help of Smart PLS. UTAUT is utilized. The independent variables in terms of technological characteristics including: performance expectancy, effort expectancy, social influence, facilitating conditions and pedagogical characteristics consist of Authentic learning and Authentic Assessment, while the mediator is behavior intention and the dependent variable is HL usage. This study revealed that facilitating conditions is the most determinants affecting HL usage; performance expectancy, effort expectancy, social influence affect behavior intention to use HL, and behavior intention to use affect HL usage. Vocational higher education institutions may use this study to understand the driving force and facilitate the adoption of hybrid learning.

Keywords—Hybrid learning adoption; determinants; tourism learning

I. INTRODUCTION

The impact of the COVID-19 outbreak on education, especially in the tourism sector, has changed the method of delivering tourism learning. Previously, tourism learning was carried out face-to-face or completely offline, but then it was carried out online for reasons of health protocols and then it was carried out in a combination between online and offline which was called hybrid learning.

Information and communication technology is currently growing to bring good changes in various aspects of life. Various methods or methods have been used to use the technology both efficiently and effectively [1];[2]; [3]. Information and communication technology provides substantial potential opportunities for organizations to improve their performance. Efforts to improve performance are often

unsuccessful because of the lack of willingness of users to accept and use the information system used. Acceptance of information and communication technology is the main requirement for the success of the implementation of an information technology [4]; [5]. Given this issue is so important, research on user acceptance of information technology has been an issue that has been researched for a long time in the field of information systems management [6]. Although the decision to adopt an information technology rests with the manager's authority, the success of using information technology depends on its acceptance and use by each individual who uses it [7]. Actually, user behavior is formed from the user's attitude and perception of the information technology. One way to understand the behavior of information and communication technology users is through studies and research on theories or models of information and communication technology adoption. There are various behavioral theories that are widely used to examine the process of adoption of information and communication technology by end-users, including Theory of Reason Action (TRA), Theory of Planned Behavior (TPB), Technology Acceptance Model (TAM) and Unified Theory of Acceptance and Use of Technology (UTAUT) [9].

Hybrid learning is information and communication technology used in the teaching and learning process which is a combination of online or virtual learning and face-to-face learning. Basically, Hybrid learning is only used for the benefit of the educational process by utilizing information and communication technology as an indirect learning medium [10]. Officially, Hybrid learning is carried out in Indonesia based on the Circular Letter of the Director General of Vocations, Ministry of Education and Culture of the Republic of Indonesia Number 4 of 2020 concerning the Implementation of Learning (Hybrid Learning) in the Even Semester of the 2020/2021 Academic Year.

The purpose of the study was to obtain a more detailed understanding of the acceptance of Hybrid learning in vocational colleges, especially in the Department of Tourism, State Polytechnic of Bali, especially seen from the perceptions

of the lecturers. The implementation of Hybrid learning in vocational colleges, especially in the Department of Tourism, State Polytechnic of Bali, in reality still experiences several obstacles, especially those related to aspects of acceptance and use of the system by lecturers. The use of the Hybrid learning system aims to provide the best solution to learning conditions where face-to-face activities must be limited for the sake of health protocols due to the COVID-19 outbreak with its endless variants.

The originality of this research cannot be doubted. To the best of my knowledge, no one has ever conducted a study on the acceptance of hybrid learning with the same variables used in this study.

II. LITERATURE REVIEW AND HYPOTHESES

A. Hybrid Learning

Research on the acceptance of new information and communication technology in the form of the adoption of Hybrid Learning Models in Geography Learning was conducted by Prihadi [14] with the article title "The Challenges of Application of The Hybrid Learning Model In Geography Learning During The Covid-19 Pandemic". This study investigates the challenges of implementing the adoption of the Hybrid Learning Model in Geography Learning in the Geography Education Study Program at FKIP UNS. The design of this research is a qualitative research with the method of interview, observation and FGD (focus discussion group). The results of the study show that the application of Hybrid Learning can improve student achievement effectively in mastering spatial citizenship skills. The suggestion of this research is that the application of HL needs to be combined with other platforms such as zoom meeting, Moodle, WhatsApp, and Open Course ware.

Research conducted by Triyono, [15] on the effectiveness of the Hybrid Learning method with the title "Analysis of the Effectiveness of Using Hybrid Learning Models in SMK Negeri 2 Surabaya". The HL implementation is used with a combination of 25% of students in class and 75% at home using the Microsoft Teams application. Qualitative descriptive method was used to analyze and describe the observational data. The data are taken from two perspectives of students and teachers in the department of computer and network engineering. The education curriculum needs to be evaluated based on data obtained from the point of view of students who disagree 47 or equivalent to 39.17% and strongly disagree 5 students or equivalent to 4.17%. Meanwhile, from the teacher's point of view, 3 people disagreed or equivalent to 60% indicating that the curriculum for implementing the hybrid learning model has not been properly regulated. Communication between teachers and students becomes less effective based on the data obtained by students choosing to disagree 65 or equivalent to 54.17% and strongly disagree 7 students or equivalent to 5.83%. Meanwhile, from the teacher's point of view, 4 people disagreed or equivalent to 80%. The conclusion of this study shows that the use of the hybrid learning model is considered less effective. This study requires a lot of refinement and study. But the application of this learning can help during the covid-19 pandemic because this

learning model divides student activities at home 75% and at school 25%.

The position of this research is different from the previous research. This study examines the adoption/use of ICT in the form of using Hybrid learning to analyze the determinants that influence the behavior of using Hybrid learning in the Tourism Department of Politeknik Negeri Bali. This study uses the UTAUT model [30] combined with Authentic Learning and Authentic assessment [26]. The independent variables in terms of technological characteristics including: performance expectancy, effort expectancy, social influence (social influence), facilitating conditions and in terms of pedagogical characteristics, they consist of: Authentic learning and Authentic Assessment, while the dependent variable is HL Usage.

B. Hypotheses

H1: Performance expectancy affect behavior intention to use hybrid learning.

H2: Effort expectancy affect behavior intention to use hybrid learning.

H3: Social influence affect behavior intention to use hybrid learning.

H4: Facilitating conditions affect hybrid learning usage.

H5: Authentic learning affect behavior intention to use hybrid learning

H6: Authentic Assessment affect behavior intention to use hybrid learning.

H7: Behavior intention to use affect hybrid learning usage.

III. RESEARCH METHOD

A cross-sectional survey was held in Tourism Department of Politeknik Negeri Bali. Google Form questionnaire distributed to 70 HL users especially lecturers. The questionnaire consists of two parts. The first part comprise demographic questions such as gender, age and education background, while the other section covers technology characteristic such as perceived ease of use, perceived usefulness, perceived risk, competency and HL usage. Likert Scales 1 to 5 level is applied in the questionnaires in which 1 indicates "strongly disagree" and 5 means "strongly agree". Data were collected and analyzed by using SmartPLS [33]. The instrument test will be carried out on the questionnaire to determine its validity and reliability before being used on the entire targeted sample..

Data analysis in this study was carried out in three stages, namely analysis of the outer model, inner model, and hypothesis testing. Outer model analysis is carried out to ensure that the measurements made are feasible, valid, and reliable by determining the relationship between latent variables and their indicators. At this stage the value of convergent validity and discriminant validity are sought. The value of convergent validity is the value of the loading factor on the latent variable (construct) and its indicators.

The indicator is declared as convergent valid if the loading factor value (λ) $\geq 0,5$ [20]. The reliability test was carried out using the Composite Reliability indicator and Cronbach's Alpha [21]. The analysis of the inner model is carried out after the evaluation of the measurement model has been successfully carried out to show valid and reliable results on all research indicators. The valid path diagram is re-run using the bootstrapping method. In the bootstrapping method there is an option to fill in the amount of resampling. [22] recommends using the number of resampling data of 5000. Evaluation of the structural model is carried out based on the value of R-Square (R2), and predictive relevance (Q2) [23]; [24]. Research hypothesis testing is measured by assessing the Path Coefficient (Mean, STDEV, T-Values) in the T-statistical column.

IV. RESULTS AND DISCUSSION

Inferential analysis for this research was done utilizing a SEM model, the data calculation process was carried out using the partial least square (PLS) method, using the SmartPLS software. The steps taken in the analysis process include: 1) evaluation of the measurement model or outer model, the point is to determine the relationship between the indicators that construct the inert variables, 2) evaluation of the structural or inner model, the objective is to determine the relationship between the variables that make up the research model and 3) hypothesis testing, to uncover the effect of independent variables towards the dependent variables..

A. Evaluation of the measurement model or outer model

In connection with the indicators that make up the latent variables in this study are reflective, the evaluation of the measurement model (outer model), to measure the validity and reliability of these indicators is as follows:

1) Convergent Validity

Convergent Validity is a criterion in measuring the validity of reflexive indicators. This evaluation is carried out by examining the outer loading coefficient of each indicator on its latent variables. An indicator is said to be valid, if the coefficient of outer loading is between 0.5 which is recommended [22]. The results of the outer loading calculation for each construct indicator, all indicators have an outer loading value > 0.50 .

2) Discriminant Validity

Estimation of the legitimacy (validity) of the pointers (indicators) that make up the idle variable should likewise be possible through discriminant legitimacy. Discriminant legitimacy should be possible by looking at the coefficient of the AVE Root (\sqrt{AVE} or Square root Normal Fluctuation Removed) of every variable with the connection esteem between factors in the model. A variable is supposed to be legitimate, in the event that the AVE root (\sqrt{AVE} or Square root Normal Difference Extricated) is more noteworthy than the relationship esteem between factors in the exploration model, and the AVE is more noteworthy than 0.50 [22]. The test aftereffects of Discriminant Legitimacy are as per the following:

The outcome shows that the AVE worth of all builds is > 0.50 , so it meets the substantial necessities in light of the discriminant legitimacy rules.

3) Composite Reliability and Cronbach Alpha

An estimation can be supposed to be dependable, in the event that the composite unwavering quality and Cronbach alpha have a worth more noteworthy than 0.70. is an estimation of dependability between pointer blocks in the exploration model.

Table 3 indicates that the composite reliability value of all constructs has shown a value greater than 0.70 so that it meets the reliable requirements according to the composite reliability criteria.

B. Structural Model and Testing of Hypothesis

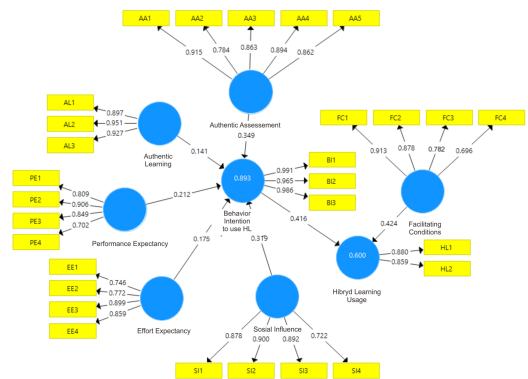


Fig. 1. Structural model of hybrid learning acceptance

Figure 1 shows that this model is able to uncover the determinants that influence the behavior of using hybrid learning in the Tourism Department of Politeknik Negeri Bali.

TABLE 1

Variables	Original Sample (O)	T Statistics (O/STDEV)	P Values	Remarks
Performance expectancy -> behavior intention to use hybrid learning	0,212	2,074	0,039	Significant
Effort expectancy -> behavior intention to use hybrid learning	0,175	2,021	0,013	Significant
Social influence -> behavior intention to use hybrid learning	0,319	2,964	0,003	Significant
Facilitating conditions -> hybrid learning usage	0,424	3,450	0,001	Significant
Behavior intention to use hybrid learning -> hybrid learning usage	0,416	2,998	0,003	Significant

Authentic learning -> behavior intention to use hybrid learning	0,141	2,301	0,010	Significant
Authentic Assessment -> behavior intention to use hybrid learning	0,349	2,755	0,006	Significant

Table 1 above shows that all hypotheses are accepted because all of the significance values are <0.05 [28]. Facilitating conditions is the most influential determinants on the use of hybrid learning with a value of $t=3,450$ and a value of $p=0.001$. This outcome is in accordance with the assessment of [28, 29].

Behavior intention has a positive significant effect on hybrid learning usage with t -value $=2,998$ and p -value $=0.003$. This is reliable with the consequences of exploration from [16, 27].

Social influence has a significant positive effect on behavior intention to use hybrid learning with $t=2,964$ and $p=0.003$. This is in line with research from [12, 18].

Authentic Assessment meaningfully affects behavior intention to use hybrid learning with $t=2,755$ and $p=0,006$. This is in line with [11, 14, 26].

Authentic Learning meaningfully affects behavior intention to use hybrid learning with $t=2,301$ and $p=0,010$. This is consistent with [12, 15, 26].

Performance expectancy has a positive significant effect on behavior intention to use hybrid learning with $t=2,074$ and $p=0,039$. This is in line with research from [15, 18].

Effort expectancy meaningfully affects Behavior intention to use hybrid learning with $t=2,021$ and $p=0,013$. This is in line with research from [28, 29].

V. CONCLUSION

The most influential determinants on the use of hybrid learning is Facilitating conditions. Educational institution is suggested to provide adequate facility to support the implementation of hybrid learning in order to be successful.

The aftereffects of this study can be utilized by lecturers and management of educational institutions to prepare strategies for implementing successful hybrid learning.

Limitation of this research is that this research is conducted in one department of an institution. Further research can be carried out on a wider scope in other areas.

ACKNOWLEDGMENT

The author would like to appreciate Ministry of Education and Culture of The Republic of Indonesia through Politeknik Negeri Bali for the support..

REFERENCES

- [1] S. Anshori, "Strategi pembelajaran di era digital (tantangan profesionalisme guru di era digital)," *Pros. Temu Ilm. Nas. Guru*, no. Strategi Pemilihan Media Pembelajaran Bagi Seorang Guru, 2016, pp. 194–202.
- [2] Suliyanto, "Pelatihan Metode Pelatihan Kuantitatif," *J. Chem. Inf. Model.*, vol. 5, no. 2, 2017, pp. 223–232.
- [3] N. S. Hanum, "Keefektifan e-learning sebagai media pembelajaran (studi evaluasi model pembelajaran e-learning SMK Telkom Sandhy Putra Purwokerto)," *J. Pendidik. Vokasi*, vol. 3, no. 1, Feb. 2013.
- [4] H. Pamugar, W.W Winarno, and W. Najib, "Model Evaluasi Kesuksesan dan Penerimaan Sistem Informasi E- Learning pada Lembaga Diklat Pemerintah" *Scientific Journal of Informatics*, 2014.
- [5] I. Mutia, and L.Leonard, "Kajian Penerapan E-Learning Dalam Proses Pembelajaran Di Perguruan Tinggi," *Fakt. Exacta*, vol. 6, no. 4, pp. 278–289, Oct. 2015.
- [6] K. M. R. A. Utama, A. Yudhana, and R. Umar, "Membangun Rancangan Sistem Informasi Menggunakan Berbasis Web Mobile," *Semin. Nas. Inform.*, vol. 1, no. 1, pp. 92–95, 2018.
- [7] F. Septa, and R. Umar, "Analisis Kepuasan Pengguna Sistem Informasi E- Government Menggunakan Metode Webqual 4.0 (Studi Kasus: Website Samsarpras Kementerian Agama)," *Methomika J. Manaj. Inform. Komputisasi Akunt.*, vol. 3, no. 2, pp. 127–135, 2019.
- [8] F. D. Davis, "Perceived usefulness, perceived ease of use, and user acceptance of information technology," *MIS Q.*, pp. 319–340, 1989.
- [9] V. Venkatesh, M. G. Morris, G.B. Davis, and F.D. Davis, "User acceptance of information technology: Toward a unified view," *MIS Q. Manag. Inf. Syst.*, vol. 27, no. 3, pp. 425–478, 2003.
- [10] R. Umar, A. Yudhana, and O.J.F. Wassalam, "Desain Antar Muka Sistem e-Learning Berbasis Web," *J. Sist. Inf.*, vol. 5341, no. April, p. 1, 2018.
- [11] D. Nugraheni, M. C. Saputra, and A. D. Herlambang, "Analisis Penerimaan dan Kesuksesan Implementasi E-Learning Universitas Brawijaya Pada Aspek Intention To Use , Use , User Satisfaction dan Net Benefits," *J. Pengemb. Teknol. Inf. dan Ilmu Komput. Univ. Brawijaya*, vol. 2, no. 5, pp. 1921–1931, 2017.
- [12] M. Ismarmiaty, "Analisis Model Penerimaan Dan Penggunaan Sistem Informasi Website Padamu Negeri Oleh Pengguna Menggunakan Model Unified Theory Of Acceptance And Use Of Technology (Utaut)," *J. Matrik*, vol. 16, no. 1, p. 77, 2017, doi: 10.30812/matrik.v16i1.13.
- [13] I. G. N. Sedana, and S. W. Wijaya, "Penerapan Model UTAUT Untuk Memahami Penerimaan Dan Penggunaan Learning Management System Studi Kasus: Experiential E-Learning of Sanata Dharma University," *J. Sist. Inf.*, vol. 5, no. 2, p. 114, 2012, doi: 10.21609/jsi.v5i2.271.
- [14] S. Prihadi, "The Challenges Of Application Of The Hybrid Learning Model In Geography Learning During The Covid-19 Pandemic," *GeoEco*, vol. 8, no. 1, pp. 1–11, 2022.
- [15] M. G. Triyono, and D. A. Dermawan, "Analisis Efektivitas Penggunaan Model Pembelajaran Hybrid Learning Di SMK Negeri 2 Surabaya Mochamad Guruh Triyono Dodik Arwin Dermawan Abstrak Abstract The COVID-19 outbreak that hit Indonesia had an impact on various existing sectors , including the edu," *J. IT-EDU*, vol. 5, 2021.
- [16] I. D. G. P. Widnyana, and I. K. Yadnyana, "Implikasi Model Utaut Dalam Menjelaskan Faktor Niat Dan Penggunaan Sipkd Kabupaten Tabanan," *J. Akunt. Univ. Udayana*, vol. 112, pp. 2302–8556, 2015.
- [17] C. F. Mang, L. A. Piper, and N. R. Brown, "The Incidence of Smartphone Usage among Tourists," *Int. J. Tour. Res.*, vol. 18, no. 6, pp. 591–601, 2016.
- [18] W. Khoirunnisak, "Implementasi Model Penerimaan Unified Theory Of Acceptance And User Of Technology (UTAUT) Untuk Menganalisis Faktor-Faktor Penerimaan Dosen Terhadap Penggunaan E-Learning Share-ITS," *Tesis*, pp. 200–202, 2016.
- [19] O. C. Robinson, and O. C. Robinson, "Qualitative Research in Psychology Sampling in Interview-Based Qualitative Research : A Theoretical and Practical Guide A Theoretical and Practical Guide," vol. 0887, no. February, pp. 1–25, 2016.
- [20] R. L. Hasanah, F. F. Wati, and D. Riana, "TAM Analysis on The Factors Affecting Admission of Students for Ruangguru Application," *J. Sist. Inf.*, vol. 15, no. 2, pp. 1– 14, 2019, doi: 10.21609/jsi.v15i2.778.

- [21] L. Altinay, M. Brookes, M. Madanoglu, and G. Aktas, "Franchisees' trust in and satisfaction with franchise partnerships," *J. Bus. Res.*, vol. 67, no. 5, pp. 722–728, 2014.
- [22] J. F. Hair, M. Sarstedt, C. M. Ringle and J. A. Mena, "An assessment of the use of partial least squares structural equation modeling in marketing research," *J. Acad. Mark. Sci.*, vol. 40, no. 3, pp. 414–433, 2012.
- [23] Chin, "1998 Plschapter.Pdf." 1998.
- [24] J. Henseler, C. M. Ringle, and R. R. Sinkovics, "The use of partial least squares path modeling in international marketing," *Adv. Int. Mark.*, vol. 20, pp. 277–319, 2009.
- [25] M. S. Donovan, J. D. Bransford, and J. D. Bransford, *How People Learn: Bridging Research and Practice*, no. January 1999.
- [26] N. Dantes, "Asesemen otentik sebagai penilaian proses dan hasil belajar dalam pembelajaran yang berbasis kompetensi. Makalah disampaikan pada workshop Politeknik Negeri Bali, 3 -10-2011," 2011.
- [27] C. P. Salman, A. Abdullah, M. Y. H. Aziz, J. Ahmad, and A. L. Kee, "Remodelling Technology Acceptance Model (TAM) In Explaining User Acceptance Towards Information And Communication Technology," *Int. J. Arts Sci.*, vol. 7, no. 1, pp. 159–171, 2014.
- [28] M.M.M.Abbad, Using the UTAUT model to understand students' usage of e-learning systems in developing countries. *Educ. Inf. Technol.*, 26, pp. 7205–7224, 2021.
- [29] T.T.Wijaya, Y. Cao, R. Weinhandl, E.Yusron, and Z.Lavicza, "Applying the UTAUT Model to Understand Factors Affecting Micro-Lecture Usage by Mathematics Teachers in China". *Mathematics*, 10, 1008, pp. 1-20, 2022.
- [30] V.Venkatesh, M. G. Morris, G. B. Davis, & F. D. Davis, "User acceptance of information technology: Toward a unified view". *Management Information Systems Quarterly*, 27, 3, pp. 426–478, 2003.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

