

Paper ICCFI 2023

by Yonathan Palumian

Submission date: 06-Jul-2023 02:57PM (UTC+0700)

Submission ID: 2127172670

File name: ICCFI_-_Yonathan_Palumian_New_0730_new.docx (177.97K)

Word count: 4637

Character count: 26120

Mobile Learning among Indonesia Gen Z: The Role of Digital Literacy, Information Literacy and Expectancy

YONATHAN PALUMIAN*

Petra Christian University

LEROY O TANNUR

Petra Christian University

ERICK VINSENSIUS WIDJAYA

Zhejiang University of Technology

WILMA LAURA SAHETAPY

Petra Christian University

The future of the internet is already here and today. This is marked by the use of internet technology that continues to grow rapidly with its capability to facilitate numerous human activities. One of the most important capacities of internet technology is its ability to expedite mobile learning leveraged by any profession. The dissemination of internet technology, however, requires digital literacy as well as information literacy performed by individual users. This study is conducted in an objective to examine the influence of digital and information literacy on the intention to use mobile technology for a learning purpose among Indonesia Gen Z. In addition, we also analyzed the mediating effect of performance expectancy between the literacy and intention relationship. This explanatory research employed a quantitative approach involving 155 Indonesian Gen Z respondents in an online questionnaire-based survey. Using Partial Least Square data processing technique, this study shows that information literacy has a significant effect on the intention to use mobile technology for learning while digital literacy does not. Besides, the statistical calculation results that performance expectancy has mediating effect only between information literacy and intention to use mobile technology for learning among Indonesia Gen Z. The business implication generated from this research shows that, since information literacy significantly forms Gen Z's expectation of mobile learning platform performance in Indonesia, Indonesia mobile learning platform providers are recommended to provide informative and alluring content to gain attraction and raise the satisfaction of using the mobile learning platform service.

CCS CONCEPTS • Applied computing~Education~E-learning • Applied computing~Education~Distance learning

Additional Keywords and Phrases: mobile learning, digital literacy, information literacy, performance expectancy

* Corresponding Author, School of Business and Management, Petra Christian University – Surabaya, Indonesia, email: ypalumian@petra.ac.id

1 INTRODUCTION

1.1 Research Background

The present time is an era where all aspects of human life are related to the use of internet technology. This era is known as the digital era, which is shown by all aspects of human life that are completely digital and automated. The digital era is a time when human activities and information are disseminated using digital and internet technology. Technology can also be interpreted as a tool or machine created to make it easier for humans to do their daily work. With the presence of digital technology in human life, it certainly has a major influence on human life [1]. Technological development such as the internet has an important role in the present development which makes digital technology inseparable from human life. One of today's prominent products of internet technology is mobile learning technology that allows people to become a learner regardless of the limitation of time and place by utilizing the internet connection. This dissemination shows that internet technology has also developed rapidly in the world of education [2].

Many businesses related to education have begun to develop in this digital era, such as online courses or tutoring businesses that use technology as a media for learning both in the use of video conferencing platforms and online assignment distribution platforms. With the availability of online tutoring options, mobile learning has been an alternative used by the gen Z members, who are also known as digital natives, to learn without meeting the teacher in person. Furthermore, the virtual learning platform business is also experiencing rapid development, one of which is the Ruang Guru application, which is the largest technology company in the world of education in Indonesia. This mobile learning platform offers an internet-based classroom with curriculum-based learning platform. The development of digital-based learning technologies such as Ruang Guru generates a positive influence to support the individual learning process. Individuals can learn whenever they want and wherever they are. In addition, individuals can get various learning resources that can be accessed using the internet technology. These technologies must be utilized effectively and efficiently in order to produce maximum results in the learning process. The effectiveness and efficiency of technology use depends on skills such as digital literacy and information literacy [3]. Digital literacy is a competency that consists of the ability to utilize digital technology to do the job at hand [4]. In the 21st century, individuals need to possess digital literacy as a necessary skill to effectively utilize digital tools in order to accomplish their life goals [5].

Digital literacy skills are important not only for developed countries but are equally important for developing countries. If people in a country have high digital literacy, they will be able to use technology effectively and efficiently to perform tasks to achieve their goals, which will increase the country's economic development [6]. With the rapid development of technology, information can be obtained easily online through the internet. Tasks can be completed easily due to the information that can be obtained easily via the internet. By capitalizing on internet connections and devices such as laptops, cellphones, and other media, people can get the desired information whenever they want and wherever they are [3].

In the presence of sufficient ability to use internet technology, human beings will be able to get the information they need easily. The consequence of this condition is the abundance of information obtained so that sometimes it can cause difficulties and confusion to get information according to needs. The numerous amounts of information obtained from the internet requires the ability to select and filter proper information that suits the needs and purposes. This is generally called information literacy. Information literacy is a set of abilities demonstrated by individuals in searching for information in a digital environment [7]. Information literacy includes skills used to evaluate information effectively. In this 21st century era, the skill related literacy both in digital literacy skills are considered very important in achieving success in education [8].

² In addition to digital literacy and information literacy, the use of mobile learning technology is also affected by the expectation of the users. Users must expect to have the desired experience in and to obtain the aim of using internet-based technology for learning [9]. This is generally called performance expectancy which refers to expectations of the performance of the adopted technology in which a person believes that it will provide benefits in carrying out certain activities [10]. Thus, in this research, we focused on the impact of digital literacy, information literacy and performance expectancy on the behavioral intention in mobile learning technology. We also highlighted the gen Z members as the subject of this research due to their immense capacity in digital usage and strong relationship internet usage for learning.

The related works of the literacy and intention of using technology for learning have been spotted in recent years. However, we found a gap of different empirical results from the study conducted by [9] which did not find a significant direct effect of the information literacy variable on performance expectancy. This result is different from the results of another research which found a significant direct effect of the information literacy variable on performance expectancy [11]. The difference in the results obtained is due to differences in research subjects in the two studies. However, regardless the evidence gap, we decide to partially replicate the research model from [9] which focuses on predicting the intention to use mobile learning technology from the formation of digital literacy, information literacy, and performance literacy.

1.2 Research Questions and Objective

According on the research background outlined above the research questions of this study can be described as the following:

¹² RQ1: Do digital literacy and information literacy have significant effects on mobile learning technology usage intention among Indonesia Gen Z?

RQ2: Does performance expectancy have a mediating effect on mobile learning technology usage intention among Indonesia Gen Z?

We also formulized the aim of this study is to examine both direct and indirect ¹ effects of digital and information literacy on intention to use mobile learning technologies among Indonesia gen Z with expectancy as a mediating role.

2 LITERATURE REVIEW

2.1 Mobile Learning Technology

Mobile learning, as an innovation based on information technology, is expected to evolve in response to emerging trends in education and technology [12]. In general, both formal and informal educational content can be effectively conveyed through innovative educational methods. Mobile technology enables educational institutions to leverage its features of flexibility, ubiquity, and portability, providing significant advantages for teachers and students in the modern digital era [13]. In order to harness student ¹² interest and maximize the benefits of mobile learning in formal and informal education settings, it is crucial to explore the relationship between user literacy, expectations, and the advantages offered by technology in education. Given the promising accessibility and opportunities that technology brings, it is important to conduct research on the benefits of mobile learning technology.

2.2 Intention to Use Technology for Learning

The intention to use technology signifies a user's inclination to utilize technology in the future [14]. It denotes an individual's willingness to engage with a particular technology in the coming time [15]. Moreover, individuals who have favorable circumstances and opportunities are more likely to exhibit a higher intention to use technology. When considering the intention to use technology for learning, it refers to the manifestation of an individual's interest in utilizing technology for educational purposes. Based on the aforementioned definitions, it can be inferred that the intention to use technology for learning represents the level of desire users have to employ technology for educational purposes in the future [16].

2.3 Digital Literacy

The concept of digital literacy encompasses an individual's understanding, mindset, and proficiency in appropriately utilizing and engaging with digital technology to readily and effectively access information in various formats within a digital setting [17]. Digital literacy comprises a range of literacies associated with the utilization of digital technology [18]. Another study suggests that digital literacy has emerged in tandem with the development of the internet, necessitating knowledge of how to access, search, and critically evaluate information [19]. An individual is deemed digitally literate when they can demonstrate the technical and practical skills required to utilize digital technology in their everyday activities [18]. Based on the aforementioned definitions, it can be concluded that digital literacy denotes an individual's competence in searching for, discerning, evaluating, and utilizing information obtained in a digital environment, as well as incorporating digital technology into their daily lives.

2.4 Information Literacy

Information literacy is defined as an individual's ability to handle information in general [20]. It is also explained that information literacy is the ability to find and evaluate information obtained using critical thinking in order to use the information wisely [19]. Information literacy is an information-based problem-solving process characterized by a sequence of interrelated actions [21]. An information literate person is a critical thinker who can find and evaluate web-based information [19]. Information literacy is the ability to support the amount of information obtained from various sources so that individuals can evaluate and analyze information according to their needs. Citing some definitions above, we can sum up that information literacy is a person's ability to be able to find the information needed easily and evaluate the information obtained to be used as needed.

2.5 Performance Expectancy

Performance expectancy is defined as user expectations of the performance of the adopted technology [22]. Another definition defines performance expectancy as the level at which a person believes that using certain technologies will provide benefits to users in carrying out certain activities [16]. In another study, it is stated that performance expectancy is the extent to which a person believes that certain technology will help improve their performance [23]. Performance expectancy is the extent to which an individual believes that the system helps to improve job performance and is closely related to the impact of certain technologies on the performance of these individuals [24]. Finally, it can be concluded that performance expectancy states the expectations that users have of the impact that certain technologies adopted will have on their work.

2.5 Hypothesis Development

From previous research [24] was found that there was a significant influence between digital literacy and intention to use digital technology. This shows that the high or low ability of users to use digital technology in their lives has a significant influence on the user's intention to use digital technology. It was also found that information literacy has a significant influence on the intention to use technology for learning. This shows that the high or low

ability of users to obtain and evaluate the information they want ¹ has a significant influence on users' intention to use digital technology for learning purposes [25]. This result is also supported by research which explains that the high or ⁵ low ability of users to obtain and evaluate the desired information will be able to significantly affect the user's intention to ¹ use digital technology [11]. In other words, the user's ability to obtain and evaluate the information he wants has a significant influence on the user's intention to use digital technology for learning purposes.

Furthermore, it was found that ¹ performance expectancy has a significant influence on intention to use technology for learning. This shows that if the high ¹ low user expectations of the performance possessed by the technology that can be useful for their lives have a significant influence on the user's intention to use digital technology for learning purposes [11]. This result is also supported by research conducted by [25] which explains ¹ that high user expectations of the performance possessed by technology can encourage user intentions to use digital technology for learning purposes. In other words, user expectations of the ² performance possessed by technology that can be useful for their lives have a significant influence on user intentions to use digital technology for learning purposes.

According to the previous related studies, we conclude 7 hypotheses as the following:

- ¹ H₁: Digital literacy has a significant effect on the intention to use technology for learning.
- H₂: Information literacy has a significant effect on the intention to use technology for learning.
- H₃: Digital literacy has a significant effect on performance expectancy.
- H₄: Information literacy has a significant effect on performance ³ expectancy.
- H₅: Performance expectancy has a significant effect on the intention to use technology for learning.
- H₆: Digital literacy has a significant effect on the intention to use technology for learning through performance expectancy.
- H₇: Information literacy has a significant effect on the intention to use technology for learning through performance expectancy.

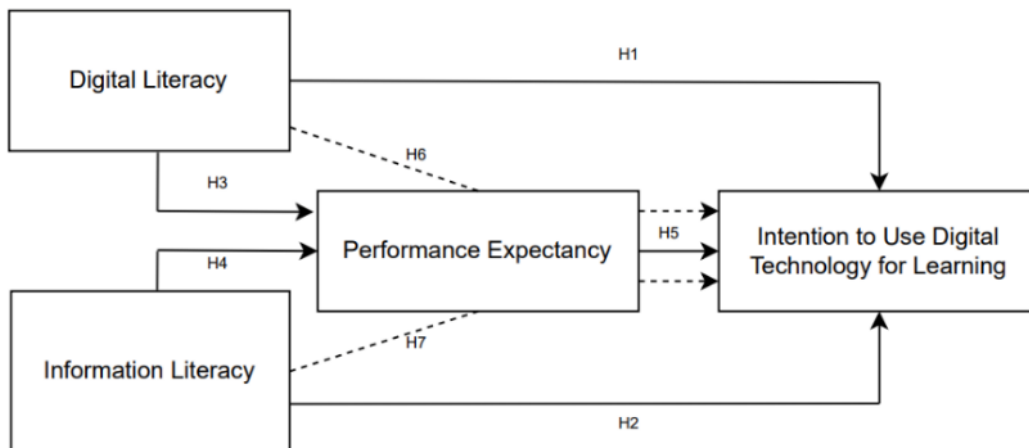


Figure 1: Research Framework

Figure 1 shows the theoretical framework of this study where we derived the constructs and hypothesis from some previous research [14] [16] [18]. According to the logical path in the figure, we predicted the use of digital

technologies for learning among Gen Z where digital literacy, information literacy, and performance expectancy played a role as predictors.

3 RESEARCH METHOD

The type of this empirical study belongs to social research since we involved the perception of technology users which are Gen Z members. In addition, research employed deductive strategy with quantitative approach with the type of research of causal research. This study was aimed for hypothesis testing formed from causal relationship among variables namely independent variable, dependent variable, and mediating variable [26]. The independent role in this study held by digital literacy (DL) and information literacy (IL). While mediating role and dependent role belong to performance expectancy (PE) and intention to use mobile technology for learning (IT).

For data collection, we used a closed questionnaire distributed through an online form link to a minimum of 130 gen Z members born between 1996-2009, live in Indonesia, have more than 1 mobile technology device, and have used the technology for more than 1 year.

Since this research occupied latent variables, the instrument of measurement was required to analyze the variables to prove the formulized hypothesis. We adopted the measurement items from several previous related works then we operationalized them down to the online questionnaire in which DL is measured by 10 indicators [18], IL is measured by 6 indicators [18], PE is measured by 4 indicators [16] and IT is measured by 6 indicators [14]. In this research, we used 5-items Likert scale where 1 represents "strongly disagree" and 5 for "strongly agree". Then, we employed PLS-SEM using SmartPLS 4.0 to run the statistical calculations with PLS algorithms as well as bootstrapping to undertake the hypothesis testing.

4 RESULT

Respondents in this study were obtained based on the research sample, namely gen Z domiciled in Indonesia who own more than 1 mobile technology device and have used digital technology for more than 1 year. This research questionnaire was distributed online from October 24 to November 7, 2022. A total of 155 questionnaires were obtained from respondents who filled out the form and 153 questionnaires were eligible for further processing. Respondent profile data collected includes gender, technology devices that are often used, and length of use of mobile technology. Table 1 indicates that most Gen Z tend to use mobile devices for learning such as smartphones and tablets with length of use more than 5 years.

Table 1. Demographic of Respondent

Profile	Freq.
Gender	
Male	79
Female	74
Tech. Device Used for Learning	
Smartphone	153
Laptop	91
Desktop Comp.	40
Tablet	34
Length of Tech. Use	
1-3 years	1
2-5 years	5
> 5 years	147

Checking the value of convergent validity requires evaluating the Average Variance Extracted (AVE) and outer loading on each latent variable (Table 2). The results of convergent validity in PLS model can be identified based on the value of outer loading. In this study, convergent validity measure is considered valid if each indicator (or manifest variable) has an outer loading > 0.5. Latent variables are also considered valid and reliable if they have an AVE > 0.5 and composite reliability > 0.7 [27].

Table 2. Validity dan Reliability Test

Variable, AVE, and Reliability	Item	Outer Loading	Remark
<i>Digital Literacy (DL)</i> AVE = 0.507 Composite Reliability = 0.910	DL01	0.599	Valid
	DL02	0.795	Valid
	DL03	0.679	Valid
	DL04	0.765	Valid
	DL05	0.766	Valid
	DL06	0.774	Valid
	DL07	0.761	Valid
	DL08	0.636	Valid
	DL09	0.744	Valid
	DL10	0.553	Valid
<i>Information Literacy (IL)</i> AVE = 0.615 Composite Reliability = 0.905	IL01	0.798	Valid
	IL02	0.822	Valid
	IL03	0.761	Valid
	IL04	0.817	Valid
	IL05	0.814	Valid
	IL06	0.685	Valid
<i>Performance Expectancy (PE)</i> AVE = 0.651 Composite Reliability = 0.882	PE01	0.761	Valid
	PE02	0.831	Valid
	PE03	0.831	Valid
	PE04	0.803	Valid
<i>Intention to Use Technology for Learning (IT)</i> AVE = 0.643 Composite Reliability = 0.915	IT01	0.734	Valid
	IT02	0.855	Valid
	IT03	0.791	Valid
	IT04	0.807	Valid
	IT05	0.871	Valid
	IT06	0.744	Valid

According to Table 3 and Figure 2, we can conclude that all indicators used for the measurements are valid and latent variables are all valid as well as reliable. Thus, we can indicate that all the measurements for DL, IL, PE, and IT are already fit from the measuring items. In addition, we also found that R-square for IT is 0.641. This means that intention to use mobile technology for learning among Indonesian Gen Z which is influenced by the variables of digital literacy, information literacy, and performance expectancy is 64.1% while the remaining 35.9% is influenced by other factors that are outside this study. For the final calculation, we conducted the bootstrapping technique provided by SmartPLS to test all the hypotheses. The result of this stage can be seen in the following figure and table.

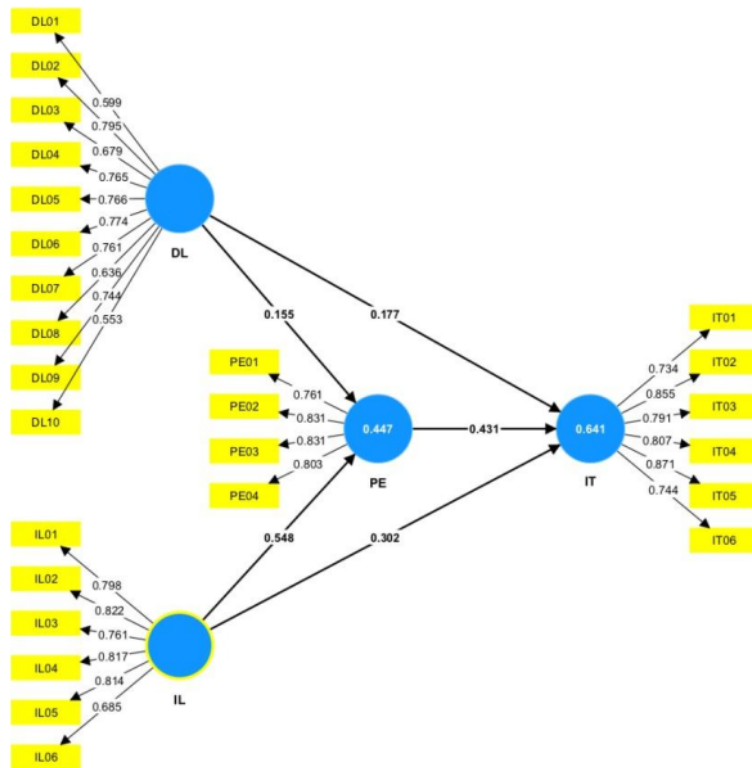


Figure 2: PLS Path Diagram Model

Table 3. Hypothesis Testing

Hypothesis	Path	Path Coefficient	T-Statistic	P-Value	Remark
H ₁	DL → IT	0.177	1.239	0.215	Not Supported
H ₂	IL → IT	0.302	2.456	0.014	Supported
H ₃	DL → PE	0.155	1.676	0.094	Not Supported
H ₄	IL → PE	0.548	5.555	0.000	Supported
H ₅	PE → IT	0.431	4.817	0.000	Supported
H ₆	DL → PE → IT	0.067	1.453	0.146	Not Supported
H ₇	IL → PE → IT	0.236	3.992	0.000	Supported

Hypothesis testing was undertaken by looking at the t-statistic obtained through the bootstrapping procedure. The significance level of a hypothesis can be identified from the p-value <0.05 and the significant value of the t-statistic > 1.96 [27]. If the p-value is less than 0.05 and the t-statistic value is greater than 1.96, then the proposed hypothesis is supported, and vice versa if the p-value shows greater than 0.05 and the t-statistic value is less than 1.96, the proposed hypothesis is rejected or not supported.

5 CONCLUSION

In summary, unlike our expectation, digital literacy (DL) has no significant effect on the intention to use mobile learning technology and performance expectancy (H₁ and H₃ are rejected) among Indonesia gen Z. Meanwhile, information literacy has a significant effect on the intention to use mobile learning technology and performance expectancy (H₂ and H₄ are accepted). For the indirect effect, it is confirmed that performance expectancy cannot mediate the relationship between digital literacy and intention to use mobile learning (H₆ is rejected) but has significant effect on the mediation between information literacy and intention to use mobile learning (H₅ and H₇ are accepted).

6 DISCUSSION

The findings of this study indicate that the key factor driving the utilization of mobile learning technology among Generation Z is their ability to access desired information. When Generation Z individuals possess a strong capacity to obtain the information they seek, they are more inclined to use digital technology as a means of acquiring knowledge. Moreover, the analysis reveals that Generation Z individuals with high information literacy skills have greater expectations regarding technology usage, particularly its usefulness in their lives. Consequently, this positively influences their intention to employ mobile technology for learning purposes. Hence, the development of a technology-driven learning environment is significantly influenced by the information literacy skills of Generation Z. To effectively create such an ecosystem, it is crucial to consider the quality, quantity, and accuracy of information available to Generation Z when using technology to foster their engagement in learning activities.

Additionally, the study demonstrates that digital literacy among Generation Z does not exert a significant impact on their intention to use mobile technology for learning. This suggests that devices such as smartphones, computers, and laptops, which are commonly employed for educational purposes, need not be a primary concern, as Generation Z already possesses a high level of proficiency in utilizing technology. Being digital natives in the current era, Generation Z individuals display a strong aptitude for employing digital technology in their learning endeavors, rendering the choice of media for online tutoring a relatively minor issue.

7 REFERENCES

- [1] J. Nugraha, "5 macam Teknologi beserta manfaatnya yang perlu diketahui," Merdeka.com, 04-Jun-2020. [Online]. Available: <https://www.merdeka.com/jateng/5-macam-teknologi-beserta-manfaatnya-yang-perlu-diketahui-kl.html>. [Accessed: 20-Apr-2023].
- [2] Molood Barati and Seyedjamal Zolhavarieh, "Mobile Learning and Multi Mobile Service in Higher Education," *International Journal of Information and Education Technology* vol. 2, no. 4, pp. 297-299, 2012.
- [3] Wilton. W. T. Fok, K. W. Lam, and Prajna. C. W. Ho, "Interactive Mobile Learning for Self-directed Learning of English Language: A Case Study of a Primary School in Hong Kong," *International Journal of Information and Education Technology* vol. 8, no. 7, pp. 496-501, 2018.
- [4] S. Mohammadyari and H. Singh, "Understanding the effect of e-learning on individual performance: The role of digital literacy," *Comput. Educ.*, vol. 82, pp. 11–25, 2015.
- [5] Sadia Aziz, Rajan Kadel, Deepani B. Guruge, Krishna Paudel, and Vanaja Karagiannidis, "Mobile Learning Approaches and Its Impact on Student's Education — A Survey," *International Journal of Information and Education Technology* vol. 11, no. 9, pp. 429-435, 2021.
- [6] Simon W. W. So, "Mobile Learning: A Topography and Research," *International Journal of Information and Education Technology* vol. 4, no. 4, pp. 340-344, 2014.
- [7] C. Addison and E. Meyers, "Perspectives on information literacy: A framework for conceptual understanding," *Information Research: An International Electronic Journal*, vol. 18, no. 3, 2013.
- [8] M. B. Eisenberg, "Information literacy: Essential skills for the information age," *DESIDOC J. Libr. Inf. Technol.*, vol. 28, no. 2, pp. 39–47, 2008.
- [9] S. Nikou and M. Aavakare, "An assessment of the interplay between literacy and digital Technology in Higher Education," *Educ. Inf. Technol.*, vol. 26, no. 4, pp. 3893–3915, 2021.
- [10] Y. Palumian, K. A. Gunawan, Z. J. H. Tarigan, and A. N. Umbara, "The role of knowledge sharing and learning orientation in improving innovative work behavior among millennials in Indonesia," *ijbs*, vol. 4, no. 1, pp. 74–84, 2021.
- [11] M. Aavakare and S. Nikou, "University Staffs' Everyday Engagement with Digital Technology—Exploring the Role of Information Literacy and Digital Literacy," in *IITS Conference*, vol. 2020, International Telecommunications Society, 2020.
- [12] M. L. Bernacki, J. A. Greene, and H. Crompton, "Mobile technology, learning, and achievement: Advances in understanding and measuring the role of mobile technology in education," *Contemp. Educ. Psychol.*, vol. 60, no. 101827, p. 101827, 2020.
- [13] C.-M. Chao, "Factors determining the behavioral intention to use mobile learning: An application and extension of the UTAUT model," *Front. Psychol.*, vol. 10, p. 1652, 2019.

- [14] T. Teo and M. Zhou, "Explaining the intention to use technology among university students: a structural equation modeling approach," *J. Comput. High. Educ.*, vol. 26, no. 2, pp. 124–142, 2014.
- [15] Y. J. Joo, S. Park, and E. Lim, "Factors influencing preservice teachers' intention to use technology: TPACK, teacher self-efficacy, and technology acceptance model," *Journal of Educational Technology & Society*, vol. 21, no. 3, pp. 48–59, 2018.
- [16] V. Venkatesh, J. Y. L. Thong, and X. Xu, "Consumer Acceptance and Use of Information Technology: Extending the Unified Theory of Acceptance and Use of Technology," *Management Information Systems Quarterly*, vol. 36, no. 1, p. 157, Mar. 2012, doi: 10.2307/41410412.
- [17] D. Cetindamar, B. Abedin, and K. Shirahada, "The role of employees in digital transformation: A preliminary study on how employees' digital literacy impacts use of digital technologies," *IEEE Trans. Eng. Manage.*, pp. 1–12, 2022.
- [18] W. Ng, "Can we teach digital natives digital literacy?," *Comput. Educ.*, vol. 59, no. 3, pp. 1065–1078, 2012.
- [19] Z.-J. Liu, N. Tretyakova, V. Fedorov, and M. Kharakhordina, "Digital literacy and digital didactics as the basis for new learning models development," *Int. J. Emerg. Technol. Learn.*, vol. 15, no. 14, p. 4, 2020.
- [20] J. D. Machin-Mastromatteo, "Participatory action research in the age of social media: literacies, affinity spaces and learning," *New Libr. World*, vol. 113, no. 11/12, pp. 571–585, 2012.
- [21] J. Beheshti, *The information behavior of a new generation: Children and teens in the 21st century*. Rowman & Littlefield, 2013.
- [22] J. Sarfaraz, "Unified theory of acceptance and use of technology (Utaut) model-mobile banking," *Journal of Internet Banking and Commerce*, vol. 22, no. 3, pp. 1–20, 2017.
- [23] M. Jambulingam, "Behavioural intention to adopt mobile technology among tertiary students," *World applied sciences journal*, vol. 22, no. 9, pp. 1262–1271, 2013.
- [24] Sumitra Nuanmeesri, "Developing Gamification to Improve Mobile Learning in Web Design Course during the COVID-19 Pandemic," *International Journal of Information and Education Technology* vol. 11, no. 12, pp. 567-573, 2021.
- [25] M. Jang, M. Aavakare, S. Nikou, and S. Kim, "The impact of literacy on intention to use digital technology for learning: A comparative study of Korea and Finland," *Telecomm. Policy*, vol. 45, no. 7, p. 102154, 2021.
- [26] U. Sekaran and R. J. Bougie, *Research methods for business: A skill building approach*, 7th ed. John Wiley & Sons, 2016.
- [27] J. F. Hair, G. T. M. Hult, C. M. Ringle, M. Sarstedt, N. P. Danks, and S. Ray, *Partial least squares structural equation modeling (PLS-SEM) using R: A workbook*. 2021.

Authors' Background

(Please fill in the information of all authors.)

Name	Email	Position (Prof , Assoc. Prof. etc.)	Research Field	Personal Website
Yonathan Palumian	ypalumian@petra.ac.id	Lecturer	Management of Technology and Innovation	https://www.linkedin.com/in/yonathan-palumian-a7035ab9/
Leroy Olen Tanur	D11190438@alumni.petra.ac.id	Alumni	Business Innovation	
Erick Vinsensius Widjaya	212522040516@zjut.edu.cn	Master Student	Business Innovation	
Wilma Laura Sahetapy	wilma@petra.ac.id	Lecturer	E-commerce, Business Law	

*This form helps us to understand your paper better; **the form itself will not be published.**

Paper ICCFI 2023

ORIGINALITY REPORT

15%

SIMILARITY INDEX

14%

INTERNET SOURCES

14%

PUBLICATIONS

5%

STUDENT PAPERS

PRIMARY SOURCES

1	www.econstor.eu Internet Source	5%
2	www.doria.fi Internet Source	2%
3	Nufri Wilis, Lindung Parningotan Manik. "The Effect of Visual Appeal, Social Interaction, Enjoyment, and Competition on Mobile Esports Acceptance by Urban Citizens", <i>Interdisciplinary Journal of Information, Knowledge, and Management</i> , 2022 Publication	1%
4	aisel.aisnet.org Internet Source	1%
5	www.emerald.com Internet Source	1%
6	paper.ijcsns.org Internet Source	1%
7	ijcst.trunojoyo.ac.id Internet Source	1%

8	Submitted to Waikato Institute of Technology Student Paper	1 %
9	journal.sbm.itb.ac.id Internet Source	1 %
10	Moonkyoung Jang, Milla Aavakare, Shahrokh Nikou, Seongcheol Kim. "The impact of literacy on intention to use digital technology for learning: A comparative study of Korea and Finland", Telecommunications Policy, 2021 Publication	1 %
11	Sigal Ben Amram, Noa Aharony, Judit Bar Ilan. "Information literacy education in primary schools: A case study", Journal of Librarianship and Information Science, 2020 Publication	1 %
12	"Well-Being in the Information Society. Fruits of Respect", Springer Science and Business Media LLC, 2020 Publication	1 %

Exclude quotes On

Exclude bibliography On

Exclude matches < 1%