

Analyzing Privacy Concern and Technology Anxiety as Determinants of Web-Based Laporkitong Adoption Level: UTAUT 2 Perspective

Analisis *Privacy Concern* dan *Technology Anxiety* Sebagai Penentu Tingkat Adopsi *Web-Based Laporkitong*: *Perspective UTAUT 2*

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Abstract

The adoption rate of the web-based Laporkitong application is uncertain, necessitating research to optimize its usage. The objective of this study is to identify the influential factors in the utilization of web-based Laporkitong, employing the Unified Theory of Acceptance and Use of Technology 2 (UTAUT 2) method with the addition of variables such as technology anxiety and privacy concern, measured using Partial Least Square Structural Equation Modeling (PLS-SEM). Data collection involved 203 respondents through online questionnaires distributed over four weeks. The analysis revealed that out of the seven measured factors determining adoption rates, only performance expectancy, social influence, facilitating condition, and behavioral intention significantly influenced the adoption level. The coefficient of determination (R^2) indicated that the independent variables used were sufficiently significant in predicting Use Behavior, at 72.2%. Consequently, the effort expectancy, social influence, facilitating conditions, and behavioral intentions emerged as crucial determinants shaping the adoption level of the web-based Laporkitong application among the people of West Papua.

Keywords: *Laporkitong; Partial Least Square Structural Equation Modeling; Privacy Concern; Technology Anxiety; UTAUT 2*

Abstrak

Tingkat adopsi aplikasi Laporkitong berbasis website belum dipastikan sehingga perlu dilakukan penelitian untuk mengoptimalkan penggunaannya. Tujuan dari penelitian ini untuk mengetahui faktor-faktor yang memiliki pengaruh dalam penggunaan *web-based Laporkitong* dengan metode *Unified Theory of Acceptance and Use of Technology 2 (UTAUT 2)* dengan penambahan variabel *Technology Anxiety* dan *Privacy Concern* yang diukur menggunakan *Partial Least Square Structural Equation Modelling (PLS-SEM)*. Pengumpulan sebanyak 203 responden dilakukan dengan menyebarkan kuesioner online selama empat minggu. Hasil analisis dari tujuh faktor penentu tingkat adopsi yang diukur, hanya *performance expectancy*, *social influence*, *facilitating condition*, dan *behavioral intention* yang berpengaruh signifikan terhadap tingkat adopsi. Hasil *coefficient of determination* (R^2) menunjukkan variabel-variabel independen yang digunakan cukup signifikan memprediksi *Use Behaviour*, yaitu sebesar 72,2%, sehingga dapat diketahui keuntungan, pengaruh sosial, kondisi yang memfasilitasi dan niat perilaku menjadi hal yang sangat berpengaruh dan menentukan tingkat adopsi aplikasi Laporkitong berbasis *website* oleh masyarakat Papua Barat.

Kata kunci: *Laporkitong; Partial Least Square Structural Equation Modeling; Privacy Concern; Technology Anxiety; UTAUT 2*

1. Introduction

Case study in this research focuses on a web-based application named Laporkitong. Laporkitong is developed and utilized by the Regional Development Planning Agency (Badan Perencanaan Pembangunan, Penelitian, dan Pengembangan Daerah - BAPPEDA), which is one of the public service agencies in Manokwari Regency, West Papua Province. The extent of user intention in using this application is not yet known, hence the need for this research.

Manokwari, as the capital of West Papua Province, has experienced significant population growth due to job market openness and accelerated development, resulting in some residents constructing dwellings that do not conform to regional spatial planning standards, resulting in issues such as building density [1]. The availability of the web-based Laporkitong application can assist the community in reporting to minimize these problems. However, the extent of adoption of the Laporkitong web application is still uncertain, as evidenced by the relatively low number of reporters, totaling 23 people. Therefore, research is needed to determine the adoption rate of the Laporkitong web application in West Papua for better optimization.

From the numerous IT adoption models that have been previously developed by other researchers such as the Theory of Reasoned Action (TRA), Theory of Planned Behavior (TPB), and Technology Acceptance Model (TAM), the researcher chooses to utilize the UTAUT 2 model in this study. This choice is made because it is deemed more suitable to measure the extent of users' interest in adopting the Laporkitong web-based application in West Papua Province. The UTAUT 2 model is often adopted as a user acceptance factor for IT, especially within an organization [2]. Additionally, the researcher integrates the UTAUT 2 model with variables such as privacy concern and technology anxiety. The addition of privacy concern is employed to understand users' privacy awareness regarding the Laporkitong web-based application. Privacy can be understood as consumers' willingness to share information through the internet, enabling various activities to take place [3]. Initially, the presence of computers had a positive impact, simplifying the lives and work of many people. However, researchers have become interested in the psychological characteristics of computer users that lead to anxiety and negative attitudes towards computer use [2].

The purpose of conducting this research is to identify the factors that influence the usage of the web-based Laporkitong. It involves the consideration of privacy concern, technology anxiety, and the utilization of the UTAUT 2 perspective. Subsequently, the study will proceed with a quantitative method for analysis.

2. Literature Review

One of the earlier studies utilizing UTAUT 2 was conducted by [2], analyzing the acceptance and usage of E-Performance in the North Sulawesi provincial government using the UTAUT2 model. The study, titled 'Analysis of UTAUT 2 Application (Unified Theory of Acceptance and Use of Technology 2) on E-Performance in the North Sulawesi Provincial Government,' revealed that out of the 8 tested hypotheses, 3 were accepted, while 5 were rejected. The hypothesis testing results indicated that the performance expectancy variable significantly influences usage interest, habit significantly influences usage behavior, and usage interest significantly influences usage behavior. However, no significant influences were found for the effort expectancy variable, social factor, facilitating conditions, hedonic motivation, and habit on usage interest. In this study, the Unified Theory of Acceptance and Use of Technology 2 (UTAUT 2) model is utilized. UTAUT 2 is a state-of-the-art Information Technology (IT) acceptance model that specifically focuses on the consumer domain, making it the chosen model for this research [2].

In previous research utilizing the UTAUT model with the addition of privacy concern and technology anxiety conducted by [3] aimed to propose an expanded model of consumer acceptance and use of information technology (UTAUT2) by incorporating new contextual components, integrated with the privacy calculus theory (PCT) model to examine factors influencing behavioral intention (BI) to use SMTA. The study titled 'Smart mobile tourism app featuring augmented reality and big data analytics: an empirical analysis using UTAUT2 and PCT models' revealed that responses were collected from 392 targeted participants, resulting in a strong response rate of 84.66%. These responses were statistically analyzed using structural equation modeling in both SPSS 22.0 and SmartPLS 3.0. It showed that personal innovativeness (IN), habit (HT), and performance expectancy (PE) significantly influence behavioral intention (BI) while privacy concern (PC) significantly affects privacy information disclosure (PI) to use SMTA. In contrast, effort expectancy (EE), hedonic motivation (HM), and privacy information disclosure (PI) have no significant effects on behavioral intention (BI) while privacy risk (PR) has no significant effects on privacy information disclosure (PI) to use SMTA. This allows app development companies to acquire app users' preferences to enhance their app development for leading app usage.

In a previous study utilizing the UTAUT model with the addition of privacy concern and technology anxiety conducted by [4], titled "Understanding use intention of mHealth applications based on the unified theory of acceptance and use of technology 2 (UTAUT-2) model in China," mobile health (mHealth) applications play a fundamental role in addressing the shortage of medical resources and meeting public healthcare needs. In this mixed-method study, we conducted in-depth interviews with 20 users in China (average age = 26.13, SD = 2.80, all born in China) during the pandemic, based on the Unified Theory of Acceptance and Use of Technology 2 (UTAUT-2) model, and identified four dimensions of user needs in mHealth scenarios: convenience, control, trust, and emotionality. Based on the interview results, we adjusted the independent variables, removed hedonic motivation and habit, and added perceived trust and perceived risk as variables. Using a Structural Equation Model (SEM), we designed the questionnaire according to the qualitative results and collected data from 371 participants (above 18 years old, 43.9% male) online to examine the relationships between these variables. The results show that performance expectancy ($\beta = 0.40$, $p < 0.001$), effort expectancy ($\beta = 0.40$, $p < 0.001$), social influence ($\beta = 0.14$, $p < 0.05$), facilitating conditions ($\beta = 0.15$, $p < 0.001$), and perceived trust ($\beta = 0.31$, $p < 0.001$) positively affect usage intention. Perceived risk ($\beta = -0.31$, $p < 0.001$) negatively influences usage intention, while price value ($\beta = 0.10$, $p > 0.5$) does not significantly impact usage intention. Finally, we discuss design and development guidelines that can enhance the user experience of mHealth applications. This research integrates actual needs and key factors influencing user usage intentions, addresses the issue of low user experience satisfaction, and provides better strategic suggestions for developing mHealth applications in the future.

The study incorporates several variables as measures, including four primary constructs: performance expectancy, effort expectancy, social influence, and facilitating condition, which influence behavioral intention, subsequently leading to use behavior. Additionally, the researcher integrates the UTAUT 2 model with variables such as privacy concern and technology anxiety. This research incorporates variables from UTAUT 2, along with the addition of two other variables, namely Technology Anxiety and Privacy Concern. The model in this study is employed to understand users' behavioral intentions, particularly regarding technology acceptance and usage [5]. Based on the previous explanation, the model in this research is as follows:

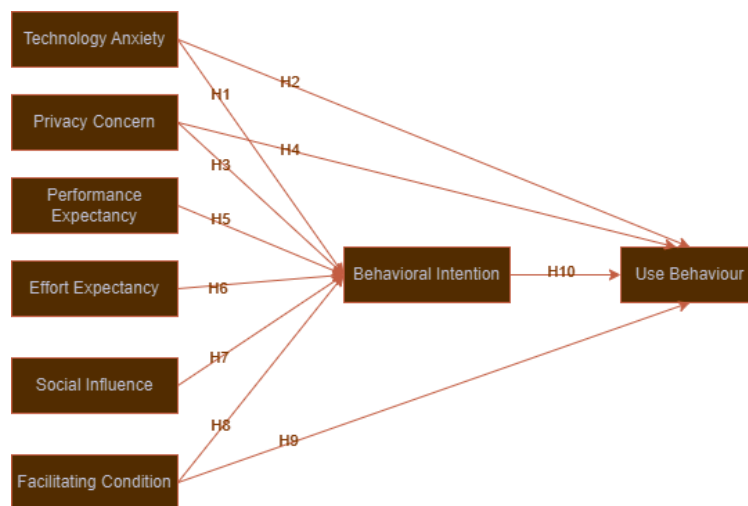


Figure 1. Research Model

The impact of anxiety on the intention to use is crucial for determining user interest. The rapid pace of technological changes presents new challenges for companies due to user resistance towards technology [6]. Previous research has also explained that Technology Anxiety significantly and positively influences Behavioral Intention and Use Behavior [7]. Therefore, this study formulates the following hypotheses:

H1: *Technology Anxiety has a significant influence on Behavioral Intention in the use of the web-based Laporkitong application.*

H2: *Technology Anxiety has a significant influence on Use Behavior in the use of the web-based Laporkitong application.*

In the previous study, it has also been explained that Privacy Concern significantly and positively influences Behavioral Intention and Use Behavior. Therefore, the following hypotheses can be formulated in this research:

H3: *Privacy Concern has a significant influence on Behavioral Intention in the use of the web-based Laporkitong application.*

H4: *Privacy Concern has a significant influence on Use Behavior in the use of the web-based Laporkitong application.*

In the previous study, it has been explained that Performance Expectancy has a significant and positive influence on Behavioral Intention [8]. Therefore, the following hypothesis can be formulated in this research:

H5: *Performance Expectancy has a significant influence on Behavioral Intention in the use of the web-based Laporkitong application.*

The more comfortable the system is to use, the more it will generate a sense of comfort when working with the system, leading to the intention to use it to leverage the system [8]. Therefore, the following hypotheses can be formulated in this research:

H6: *Effort Expectancy has a significant influence on Behavioral Intention in the use of the web-based Laporkitong application.*

The greater influence exerted by an environment on potential users of new information technology, the higher the interest that arises from these prospective users in adopting the technology, due to the strong impact of their surrounding environment [8]. Therefore, the following hypotheses can be formulated in this research:

H7: *Social Influence has a significant impact on Behavioral Intention in the use of the web-based Laporkitong application.*

Facilitating conditions, as a measure of the level at which a user trusts a system facilitating the utilization of a technology [9]. In the previous study, it was explained that Facilitating Condition has a positive and significant relationship with Behavioral Intention and also Use Behavior [9]. Therefore, in this study, the following hypotheses are formulated:

H8: *Facilitating Condition has a significant influence on Behavioral Intention in the use of the web-based Laporkitong application.*

H9: *Facilitating Condition has a significant influence on Use Behavior in the use of the web-based Laporkitong application.*

Usage behavior refers to the frequency of technology use by individuals [2]. Therefore, the following hypotheses can be formulated in this research:

H10: *Behavioral Intention has a significant influence on Use Behavior in the use of the web-based Laporkitong application.*

3. Methodology

This research employs a quantitative approach methodology. The quantitative approach is used in proposing research, processes, hypotheses, data collection, data analysis, and drawing conclusions, using measurements in numerical form and adhering to statistical principles. The study was conducted from October to December 2023. The questionnaire for this research has been distributed online to the residents of West Papua Province. The population for this study is the community in West Papua Province who have used the web-based Laporkitong application. This research utilizes primary data, which is data obtained or collected directly by the researcher from its source. The data collection process involves distributing questionnaires to respondents with written statements to be answered.

The purpose of utilizing this questionnaire is to identify and understand the factors influencing the community to adopt the web-based Laporkitong application according to their needs online, with the assistance of Google Forms. The questionnaire structure in this study includes an explanation of the research objectives, respondent identity section, instructions for filling out the questionnaire, and the final section containing structured statements about the research constructs. In this study, the questionnaire is designed based on several constructs in the Unified Theory of Acceptance and Use of Technology 2 (UTAUT 2), namely Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), Facilitating Condition (FC), with additional constructs, namely Technology Anxiety (TA) and Privacy Concern (PC). The collected data will be processed in Microsoft Excel and then converted into CSV format before being analyzed using Smart-PLS software for statistical analysis.

4. Results and Discussion

In this study, data from respondents were successfully collected for four weeks, starting from January 1st to February 1st, 2024, totaling 203 valid respondent data. Respondent data were obtained from the residents of West Papua Province. Demographic information about the respondents, including gender, age, and occupation, is presented in the following Table 1:

Table 1. Description of Respondents' Demographics

Category	Item	Quantity	Percentage
Gender	Male	92	45,32 %
	Female	111	54,68 %
Age	17 – 25	40	19,70 %
	26 – 34	88	43,35 %
	>35	75	36,95 %
Job	Student	30	14,78 %
	PNS	56	27,59 %
	TNI – POLRI	7	3,45 %
	Entrepreneur	3	1,48 %
	Contract Employee	43	21,18 %
	Non-Governmental	31	15,27 %
	Business Person	16	7,88 %
	Housewife	17	8,37 %

In this research, Convergent Validity, Discriminant Validity, and Composite Reliability tests have been conducted to assess the outer model [10]. The Loading Factor (LF) test is used in the convergent validity test. An indicator is considered to have good convergent validity with a standard outer loading value > 0.7 [11]. AVE is a standard value that each variable should have, with a minimum of > 0.5 to fulfill convergent validity [12].

Reliability testing is conducted using two methods, namely Cronbach's Alpha (CA) and Composite Reliability (CR). Constructs are considered reliable if the values for CA and CR are above 0.70 [13]. In this study, confirmatory analysis of variables has been presented in Table 2 below:

Table 2. Confirmatory Variable Results

Construct	Question Items	Code	LF
Technology Anxiety (TA) [14] CA, CR, AVE = 0.849, 0.898, 0.689	I feel nervous when using the Laporkitong website application.	TA1	0.804
	I feel worried when using the Laporkitong website application.	TA2	0.896
	I feel uncomfortable when using the Laporkitong website application.	TA3	0.869
	I feel confused when using the Laporkitong website application.	TA4	0.742
Privacy Concern (PC) [15] CA, CR, AVE = 0.844, 0.889, 0.668	I feel monitored when using the Laporkitong website application.	PC1	0.729
	I feel all actions are tracked when using the Laporkitong website application."	PC2	0.854
	I feel unsafe providing information when using the Laporkitong website application."	PC3	0.918
	I feel the information I provide on the Laporkitong website application will be misused."	PC4	0.754
Performance Expectancy (PE) [16] CA, CR, AVE = 0.928, 0.949, 0.823	I feel that the Laporkitong website application is useful in spatial planning in West Papua Province.	PE1	0.931
	I feel that the Laporkitong website application improves the quality of online reporting.	PE2	0.917
	I feel that by using the Laporkitong website application, I can quickly report online related to spatial planning.	PE3	0.905
	I feel that I gain a lot of information when using the Laporkitong website application.	PE4	0.876
Effort Expectancy (EE) [16] CA, CR, AVE = 0.890, 0.932, 0.820	I find the Laporkitong website application easy to use.	EE1	0.885
	Learning to use the Laporkitong website application is very understandable for me.	EE2	0.933
	I perceive the Laporkitong website application as highly informative.	EE3	0.897
Social Influence (SI) [16] CA, CR, AVE = 0.809, 0.866, 0.685	I use the Laporkitong website application because someone important to me requires me to use it.	SI1	0.921
	I use the Laporkitong website application because I am influenced by someone with a higher position in my workplace.	SI2	0.801
	I use the Laporkitong website application because my family insists that I use it.	SI3	0.752
Facilitating Condition (FC) [17] CA, CR, AVE = 0.856, 0.903, 0.701	I possess the required devices to utilize the Laporkitong website application.	FC1	0.748
	I utilize the Laporkitong website application due to the presence of supporting resources.	FC2	0.888
	I possess sufficient knowledge/understanding to operate the Laporkitong website application.	FC3	0.898
	I can seek assistance from others when encountering challenges in using the Laporkitong website application.	FC4	0.805
Behavioral Intention (BI) [18]	I intend to keep using the Laporkitong website application in the future.	BI1	0.915

Construct	Question Items	Code	LF
CA, CR, AVE = 0.928, 0.949, 0.824	I will consistently try to incorporate the use of the Laporkitong website application into my daily life.	BI2	0.923
	I have plans to use the Laporkitong website application more frequently.	BI3	0.926
	I find satisfaction in using the Laporkitong website application to address spatial planning issues in West Papua Province.	BI4	0.865
Use Behaviour (UB) [19] CA, CR, AVE = 0.858, 0.914, 0.779	I feel that most of my spatial planning reporting activities are done through the Laporkitong website application.	UB1	0.879
	I frequently utilize the services of the Laporkitong website application.	UB2	0.879
	I heavily rely on the Laporkitong website application to address spatial planning issues.	UB3	0.890

In this study, discriminant validity testing was conducted using the Fornell-Larcker test, by comparing the square root of the AVE with the correlations between latent variables [20]. Fornell-Larcker is tested by examining the square root of AVE, which should be greater than the correlations between latent variables. The results of the Fornell-Larcker test in this study have good values and have been presented in Table 3 as follows:

Table 3. Discriminant Validity

	BI	EE	FC	PC	PE	SI	TA	UB
BI	0.908							
EE	0.774	0.905						
FC	0.779	0.730	0.837					
PC	-0.213	-0.227	-0.105	0.817				
PE	0.786	0.796	0.722	-0.192	0.907			
SI	0.392	0.379	0.380	0.203	0.271	0.828		
TA	-0.254	-0.272	-0.165	0.632	-0.251	0.147	0.830	
UB	0.842	0.668	0.712	-0.125	0.695	0.409	-0.144	0.883

In this study, the inner model is evaluated by examining the R-Square values for dependent constructs, indicated by the t-value and path coefficient to observe substantive influence [18]. Variance Inflation Factor (VIF) is used to assess collinearity, a common issue in statistics. The VIF value should be < 5 , and tolerance value > 0.2 to avoid collinearity [19]. The criteria for the magnitude of R-Square are as follows: a value of 0.75 is considered strong, 0.50 indicates a moderately or moderately strong model, and 0.25 suggests a weak model [10].

The coefficient parameter values and the significance of t-statistics are examined through hypothesis testing, specifically using the bootstrapping method [21]. In this study, the p-value is employed with a significance level of < 0.05 . The research also utilizes the t-table value for a two-tailed test, which is 1.96 at a 5% significance level [22]. It is known that out of ten hypotheses, four hypotheses are accepted, namely H5, H7, H8, and H10, while H1, H2, H3, H4, H6, and H9 are rejected as they do not meet the predetermined criteria.

From Figure 2, the highest value from the bootstrapping test results is the variable Behavioral Intention to Use Behaviour, which is 9.616. Therefore, it can be known that this relationship has a significant influence. Meanwhile, the lowest value is 0.128, the relationship between Privacy Concern and Behavioral Intention, which has a value < 1.96 and can be interpreted as indicating that the relationship does not have a significant influence.

Table 4 Structural Model Evaluation

Hypothesis	T statistics	P values	Results
H1: TA → BI	0.581	0.561	Rejected
H2: TA → UB	1.161	0.246	Rejected
H3: PC → BI	1.193	0.233	Rejected
H4: PC → UB	0.128	0.898	Rejected
H5: PE → BI	4.282	0.000	Accepted
H6: EE → BI	1.911	0.056	Rejected
H7: SI → BI	2.291	0.022	Accepted
H8: FC → BI	4.406	0.000	Accepted
H9: FC → UB	1.653	0.098	Rejected
H10: BI → UB	9.616	0.000	Accepted

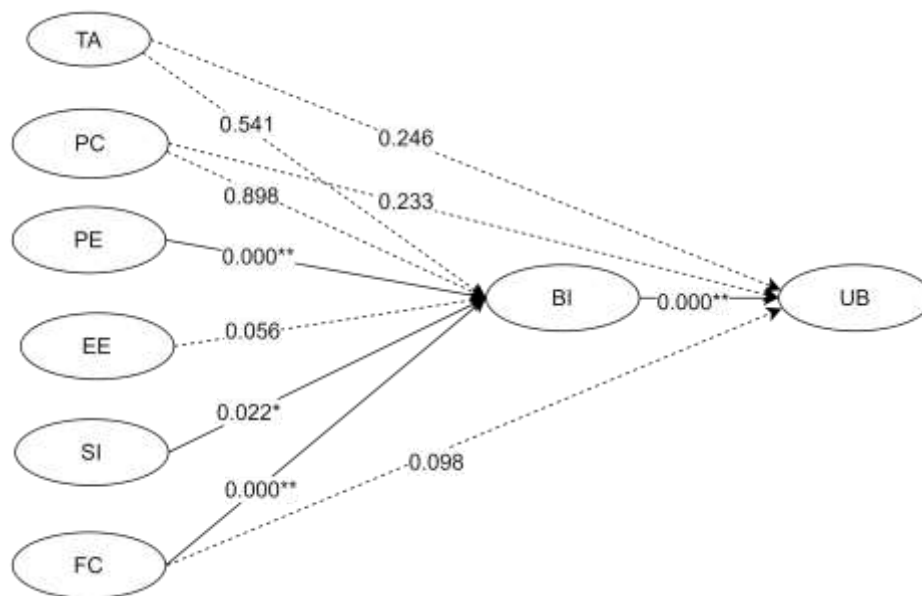


Figure 2. Final Results Model

(*p-value <0.05, **p-value <0.001)

The analysis in this study provides results for relevant parties, namely the government of West Papua Province, as an effort to understand the level of adoption of the web-based Laporkitong application. From the research findings, it can be observed that factors such as technology anxiety, privacy concerns, ease of use, and facilitating conditions do not significantly influence the usage of the web-based Laporkitong application. However, perceived benefits, social influence, facilitating conditions, and behavioral intention have a significant impact on adopting the web-based Laporkitong application. By addressing the variables that have less influence, improvements can potentially enhance the adoption of the web-based Laporkitong application within the community.

The results indicate that Behavioral Intention significantly and positively influences the Use Behavior of the Laporkitong web-based application. This finding aligns with the research conducted by [18], which states that Behavioral Intention has a direct and positive impact on usage behavior. Thus, it can be concluded that the intention to continue using, trying to use,

planning to use frequently, and liking to use have an impact on the usage behavior of the Laporkitong web-based application.

5. Conclusion

Based on the background of this research conducted to determine the level of adoption of the Laporkitong web-based application, the study was carried out to optimize its use further. This research utilized the Unified Theory of Acceptance and Use of Technology 2 (UTAUT 2) method with additional variables, namely Technology Anxiety and Privacy Concern. Therefore, from the results of this study, it can be inferred that factors influencing the use of the Laporkitong web-based application can be identified. The R-Square test results on the Behavioral Intention variable indicate a value of 0.745, meaning that the variables Technology Anxiety, Privacy Concern, Performance Expectancy, Effort Expectancy, Social Influence, and Facilitating Condition can explain the influence on the Behavioral Intention variable by 74.5%, with a moderate predictive strength on Behavioral Intention. The R-Square test results on the Use Behavior variable indicate a value of 0.722, meaning that the variables Technology Anxiety, Privacy Concern, Facilitating Condition, and Behavioral Intention can explain the influence on the Use Behavior variable by 72.2%, with a moderate predictive strength on Use Behavior.

The results explain that out of 203 respondents, 151 respondents have adoption intentions, and 146 respondents exhibit usage behavior towards the Laporkitong website-based application. It can also be observed from the hypothesis testing results that six variables have a limited impact: Technology Anxiety on Behavioral Intention and Use Behavior, Privacy Concern on Behavioral Intention and Use Behavior, Effort Expectancy on Behavioral Intention, and Facilitating Condition on Use Behavior. Therefore, it is concluded in this study that users feel that factors such as technology anxiety, privacy concern, effort expectancy, and facilitating condition have a limited influence on the intention and adoption rate of the Laporkitong website-based application. However, users express adoption intentions and behavior due to the benefits (performance expectancy), social influence, facilitating conditions, and behavioral intentions of the Laporkitong website-based application.

References

- [1] J. Marwa, A. S. Sineri and F. Hematang, "Daya Dukung Bioekologi Hutan dan Lahan di Kabupaten Manokwari, Provinsi Papua Barat," *Jurnal Sylva Lestari*, vol. 8, no. 2, pp. 197-206, 2020.
- [2] A. A. Onibala, Y. Rindengan and A. S. Lumenta, "Analisis Penerapan Model UTAUT 2 (Unified Theory of Acceptance and Use Of Technology 2) Terhadap E-Kinerja Pada Pemerintah Provinsi Sulawesi Utara," *E-Journal Teknik Informatika*, vol. 1, no. 1, pp. 1-13, 2021. P.Y.H Sia and Y. H. P. Iskandar, "Smart Mobile Tourism App Featuring Augmented Reality and Big Data Analytics: an empirical analysis using UTAUT2 and PCT Models," *Journal of Science and Technology Policy Management*, Vol. 1, no. 2, pp. 2053-4620, 2023.
- [3] Y. Zhu, Z. Zhao, J. Guo, Y. Whang, C. Zhang, J. Zheng and W. Liu, "Understanding use intention of mHealth applications based on the unified theory of acceptance and use of technology 2 (UTAUT 2) model in china," *International Journal of environmental research and public health*, Vol. 20, no. 4, pp. 3139, 2023.
- [4] S. D. Ardiyanti, ""Faktor-Faktorr yang Mempengaruhi Niat Belanja Fahion Online"," in *Doctoral Dissertation, Universitas Islam Indonesia*, Yogyakarta, 2023.
- [5] W. Raza, F. Ali, N. Raza, Y. Luo, K. Kim, J. Yang and E. E. Kwon, "Recent advancements in supercapacitor technology," *Nano Energy*, vol. 52, no. 2, pp. 441-473, 2018.
- [6] A. D. Oktavianita and M. U. Siregar, ""Pengaruh Faktor Model UTAUT (Unified Theory of Acceptance and Use of Technology) Terhadap Niat Generasi Milenial Dalam Menggunakan Mobile Banking di Indonesia"," *Jurnal Ekonomi dan Bisnis*, vol. 4, no. 2, pp. 649-660, 2021.

- [8] K. Gupta and N. Arora, "Investigating Consumer Intention To Accept Mobile Payment System Through Unified Theory of Acceptance Model: An Indian Perspective", *South Asian Journal of Business Studies*, vol. 9, no. 1, pp. 88-114, 2020.
- [9] N. K. R. D. Putri and I. M. S. Suartika, "Penerapan Model UTAUT 2 Untuk Menjelaskan Niat dan Perilaku Penggunaan E-Money di Kota Denpasar", *Sumber*, vol. 232, no. 2019, p. 971, 2019.
- [10] I. Ghozali, "Aplikasi Analisis Multivariate Dengan Program SPSS", in *Badan Penerbit Universitas Diponegoro*, Semarang, 2011.
- [11] Siagian, M. Kurniawan and H. Hikmah, "Analisis Faktor Eksternal dan Internal Terhadap Kinerja UMKM di Kota Batam", *Jesya (Jurnal Ekonomi dan Ekonomi Syariah)*, vol. 2, no. 2, pp. 265-271, 2019.
- [12] I. S. Wijaya, D. Sandra, K. Khairuldi and S. Sharipuddin, "Tingkat Kesuksesan E-Learning Edmodo Sebagai Sistem Pembelajaran Online Selama Pandemi Covid 19 Adopsi Model DeLone & McLean", *Jurnal Sisfokom (Sistem Informasi dan Komputer)*, vol. 11, no. 3, pp. 297-303, 2022.
- [13] S. Sayyida, "Structural Equation Modeling (SEM) Dengan SmartPLS Dalam Menyelesaikan Permasalahan Di Bidang Ekonomi", *Journal MISSY*, vol. 4, no. 1, pp. 6-13, 2023.
- [14] L. Xue, "An Exploratory Study of Ageing Women's Perception On Acces To Health Informatics Via A Mobile Phone-Based Intervention", *J. Med. Inform*, vol. 81, no. 9, pp. 637-648, 2012.
- [15] A. A. Hetami and W. Bharata, "Pengaruh Online Privacy Concern Terhadap Knowledge Hiding dan Dampaknya Pada Online Collaborative Learning di Fisip Mulawarman", *Indonesian Journal of Instruction Technology*, vol. 2, no. 2, pp. 1-7, 2021.
- [16] M. A. Mahfuz, L. Khanam and W. Hu, "The Influence Of Culture On M-Banking Technology Adoption: An Integrative Approaches of UTAUT 2 and ITM", *Portland International Conference on Management of Engineering and Technology (PICMET)*, vol. 1, no. 1, pp. 824-835, September 2016.
- [17] M. Alsheri, S. Drew, T. Alhussain and R. Alghamdi, "The Effects Of Website Quality on Adoption of E-Government Service: An Empirical Study Applying UTAUT Model Using SEM", *Australasian Conference On Information Systems*, vol. 1, no. 1, pp. 1-13, 2012.
- [18] A. W. Setiawan and S. Setiawan, "Analisis Penerapan Metode Task Technology Fit (TTF) Pada Customer Samsung Menggunakan Aplikasi Smart Tutor", *Nusantara Journal Of Multidisciplinary Science*, vol. 1, no. 3, pp. 675-688, 2023.
- [19] J. F. Hair, M. Sarstedt and C. M. Ringle, "When To Use And How To Report The Results of PLS-SEM", *European Bussiness Review*, vol. 31, no. 1, pp. 2-24, 2019.
- [20] R. Furadantin, "Analisis Data Menggunakan Aplikasi SmartPLS v. 3.2.7 2018", *Jurnal Manajemen*, vol. 1, no. 1, pp. 1-18, 2018.
- [21] M. P. Pura and P. N. Madiawati, "Pengaruh Promotion Mix dan Gaya Hidup Terhadap Keputusan Pembelian Di Shopee Dengan Perilaku Konsumen Sebagai Variabel Intervening", *JEMMA (Journal, of Economic, Management and Accounting)*, vol. 4, no. 2, pp. 204-216, 2021.
- [22] V. Venkatesh, "Adoption and use of AI tools: a research agenda grounded in UTAUT. ", *Annals of Operations Research*, vol. 1, no. 1, pp. 157-178, 2022.