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THE INTENTION TO USE OF A NEW MOBILE APPS: A CASE FROM CUSTOMERS OF AN INDONESIAN ELECTRITY COMPANY

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Abstract

Mobile apps are now an integral part of our daily life which brought quite significant changes in consumer behavior. PT PLN (Persero), the Indonesian Electricity Company launched their new mobile apps in 2022 with the objective to provide better customer engagement and service. New PLN Mobile is an application used by PT PLN (Persero) to facilitate customers in enjoying every service provided by the company. This study integrates constructs from the mobile-technology acceptance model (M-TAM) and unified theory of acceptance and use of technology model (UTAUT) into a new theoretical model and tests them to a one of rural regions in Indonesia. The study was conducted by using a structured questionnaire to collect data from 566 respondens of customers of PT PLN (Persero) PLN ULP Jeneponto. The research model was assessed using the partial least squares structural equation model (PLS-SEM) methodology, facilitated by the Smart PLS software to provide insights into the factors that determine the acceptance of technology, which can explain user behavior. The results revealed significant relationships for all of the hypotheses. Mobile Usefulness to Intention to Use (H1), Mobile Ease of Use to Intention to Use (H2), Social Influence to Intention to Use (H3), Facilitating Condition to Intention to Use (H4) and Intention to Use to Actual Use (H5) showed t-stat values respectively, surpassing the standard test value. In the results, it can also be observed that the most significant factor influencing Intention to Use is Facilitating Condition.

Keywords: Mobile Apps, Customer Readiness, Rural Area, PLS-SEM

Introduction

Every company worldwide heavily relies on customers, where customers are one of the determinants of whether a company can operate well or not. Customer satisfaction is an issue closely related to this matter. In this digital era, the internet serves as the hub of human activities, causing many companies in Indonesia to extensively transform using electronic services for marketing and distributing services to customers. In recent years, technology has rapidly advanced, especially in mobile devices. This has brought quite significant changes in consumer behavior. Therefore, the development of electronic service quality becomes a crucial factor to consider in determining whether digital transformation affects customer satisfaction (Lew et al., 2020).

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PT PLN (Persero) Unit Layanan Pelanggan Jeneponto is one of the power distribution units of PT PLN (Persero) that directly interacts with customers located in Jeneponto Regency. Jeneponto is one of the regencies situated in South Sulawesi, Indonesia.

As of March 2023, there are a total of 93,634 household customers registered with PT PLN (Persero) ULP Jeneponto Among these, 61,829 households receive electricity subsidies from the government, which accounts for approximately 66% of the total. This indicates that the majority of the population in Jeneponto Regency falls under the category of economically disadvantaged communities. Additional supporting data reveals that Jeneponto Regency was only removed from the rural area (Frontier, Remote, Disadvantaged) region classification in 2019. The results of the 2020 population census indicate that Jeneponto Regency has the highest percentage of impoverished population in South Sulawesi province. The related infographic is provided below:

In 2022, PLN's press release declared its digital transformation with the aspirations of being Green, Lean, Innovative, and Customer-Focused. Among these four aspirations, PLN achieved a breakthrough in its digital transformation program, one of which is the relaunch of PLN Mobile, now referred to as the New PLN Mobile application. This application serves as a means of PLN service that conveniently places the power of PLN in the hands of customers. With PLN's digital transformation, offline service outlets have been eliminated, and services that were previously accessible through PLN's website are now directed towards the use of the PLN Mobile app. The emergence of e-Services throughout society has sparked both support and opposition, particularly in areas classified as rural area regions. Consequently, there is a perceived need for societal readiness to embrace electronic services in the form of such applications to access PLN services.

Considering the aforementioned issues, the author attempts to analyze the factors of customer readiness in adopting the New PLN Mobile electronic service in Jeneponto Regency using a combination of MTAM and UTAUT frameworks. Data processing is conducted to provide insights into the factors that determine the acceptance of technology, which can explain user behavior. To address this concern, it is necessary to propose an acceptance model applicable to all types of electronic services and applications (Binyamin & Zafar, 2021). The analysis results are expected to identify the specific electronic service types that are required by PLN customers in that region.

Scholars have employed various theories and models related to the acceptance of technology (like TAM, UTAT, and UTAUT2) to elucidate user adoption of novel advancements. Among these influential models, TAM, formulated by Davis in 1986, holds a significant place. This model was established on the foundation of the theory of reasoned action (TRA). Despite the abundance of research on user acceptance within the field of information systems, there is a scarcity of literature concerning the acceptance of mobile apps in rural area. Furthermore, the available literature is accompanied by various constraints.

Research in this thesis draws on several prior studies as references. The absence of specific research addressing and analyzing the readiness for using mobile apps, particularly the New PLN Mobile application, in rural area areas makes this study quite significant, as it will provide solutions, recommendations, and insights into the development of mobile applications in rural area regions.

The research conducted by various scholars has explored different aspects of technology adoption across various domains. Rafique et al. (2020) investigated the adoption of Mobile Library Apps by librarians, focusing on variables like habit, perceived usefulness, system quality, perceived ease of use, and behavioral intention to use within the framework of TAM. Okoroji et al. (2021) examined the adoption of Mobile Apps among farmers, considering social influence, perceived risk, perceived cost, information awareness, and perceived usefulness as key variables using the TAM model. Kamal et al. (2020) delved into the adoption of telemedicine by patients, analyzing variables such as privacy, trust, perceived usefulness, perceived ease of use, social influence, facilitating conditions, technological anxiety, user's resistance, and perceived risk through a TAM-PLS-SEM approach.

Lew et al. (2020) studied the adoption of M-Wallet among patients, exploring variables like mobile self-efficacy, technology self-efficacy, mobile usefulness, mobile ease of use, perceived critical mass, perceived enjoyment, and behavioral intention using the MTAM model. Graf et al. (2023) focused on doctors and the adoption of E-Prescription, considering variables such as technical barriers, attitude toward electronics, effort expectancy, perceived demand, and usage intention within the TAM-UTAUT framework. Al-Saedi et al. (2020) examined customer adoption of M-Payment, analyzing perceived risk, perceived trust, perceived cost, self-efficacy, performance expectancy, effort expectancy, and social influence using the UTAUT model.

Batucan et al. (2022) studied college students' adoption of online learning systems, considering variables like system interactivity, system enjoyment, system flexibility, system quality, social influence, effort expectancy, performance expectancy, facilitating conditions, and behavioral intention within the UTAUT framework. Chau (1996) investigated student adoption of mobile learning apps, focusing on variables such as mobile self-efficacy, effort expectancy, perceived enjoyment, performance expectancy, satisfaction, perceived risk, behavioral intention, and trust using the UTAUT model.

Ugur and Turan (2019) explored the adoption of mobile apps by young people, considering variables related to basic needs, perceived usefulness, performance expectancy, subjective norms, attitude toward using, and behavioral intention. Binyamin and Zafar (2021) examined patient adoption of mobile health apps, analyzing perceived use, perceived usefulness, attitude toward behavior, subjective norms, and facilitating conditions within the TAM-UTAUT framework. Finally, Alghazi et al. (2021) investigated student adoption of mobile learning apps, focusing on variables such as performance expectancy, effort expectancy, social influence, price value, intention to use, and various technical factors using the UTAUT model. These diverse studies contribute to our understanding of technology adoption across different contexts and user groups.

While the studies conducted by these various scholars provide valuable insights into technology adoption within their respective domains and user groups, there are several common gaps that these studies examine technology adoption in different domains (e.g., libraries, healthcare, education, finance) and there is limited cross-domain comparison. Some studies employ specific models (e.g., TAM, UTAUT) tailored to their contexts, but there is an opportunity to integrate multiple theoretical frameworks to create a more comprehensive understanding of adoption. For example, combining TAM, UTAUT, and TPB elements could yield a richer model. While these studies focus on user-centric factors, they often do not deeply explore contextual elements such as organizational culture, policy, or external market dynamics. Understanding the diverse needs,

motivations, and barriers among user groups is crucial. Most studies focus on intention to use as a behavioral outcome. Exploring actual usage behavior and its relationship with intention and other factors would offer a more comprehensive view of adoption. In summary, while the cited studies have significantly contributed to our understanding of technology adoption, there is room for further exploration, particularly in terms of cross-domain comparisons, longitudinal research, contextual factors, and a more comprehensive integration of theoretical frameworks. These gaps represent opportunities for future research to advance our knowledge in this important field.

Based on previous studies, there are several models used in technology acceptance research, including TAM, its advanced form MTAM, and UTAUT. Considering the prior research, the variables used in TAM are Perceived Usefulness and Perceived Ease of Use, which are modified in MTAM to become Mobile Usefulness and Mobile Ease of Use. As this study focuses on mobile apps, the author adopts Mobile Usefulness and Mobile Ease of Use as the independent variables. Meanwhile, UTAUT's Social Influence and Facilitating Condition are commonly used main variables. In this study, these variables are taken as independent variables because it involves social issues, given that the research is conducted in a former rural area area. This approach aims to understand the extent of the influence of social factors and existing facilities on the app's usage.

Hypothesis

Based on the literature review conducted and considering previous research, this study integrates several variables from different methods, proposing the following model:

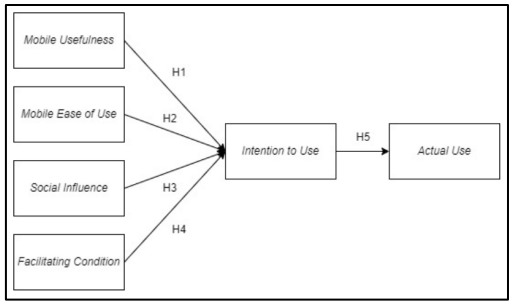

Figure 1. Proposed Model

This study utilizes a combination of variables from MTAM and UTAUT. The variables Mobile Usefulness and Mobile Ease of Use are adapted from MTAM, which is a modification of TAM specifically tailored for mobile applications. In the original TAM concept, Perceived Usefulness becomes Mobile Usefulness, and Perceived Ease of Use becomes Mobile Ease of Use. On the other hand, the variables Social Influence and Facilitating Condition are adopted from the structural model of UTAUT. This research aims to explore the relationships between these variables and is expected to contribute to the analysis of factors influencing the acceptance of mobile applications in rural area regions.

According to Sugiarto (2022) research variables are characteristics that can be observed in the units of analysis, serving as identifiers or attributes of a group of objects. The essence of these variables lies in the occurrence of variations among different objects within a specific group. Meanwhile, Arikunto (2016) explains that research variables encompass everything that researchers study to gather information and subsequently draw

conclusions. Based on the opinions of these experts, it can be inferred that research variables are objects represented as data, which are collected by researchers through designated research subjects. These data are then studied to derive conclusions and insights.

In this study, there are three types of variables used, namely independent variables consisting of *Mobile Usefulness, Mobile Ease of Use, Social Influence, and Facilitating Condition*. The dependent variable in this study is *Actual Use*, and the moderating variable is *Intention to Use*.

Based on the research model presented in Figure 1, the hypotheses are formulated for each variable. The hypotheses for each variable are as follows:

H1 : Mobile Usefulness Significantly Influences Intention to Use
H2 : Mobile Ease of Use Significantly Influences Intention to Use
H3 : Social Influence Significantly Influences Intention to Use
H4 : Facilitating Condition Significantly Influences Intention to Use
H5 : Intention to Significantly Influences Actual Use

These hypotheses are constructed based on established theories in the field of technology adoption and behavioral intention. They aim to investigate the relationships between key factors, such as perceived usefulness, ease of use, social influence, facilitating conditions, intention to use, and actual use, which are central to understanding how individuals adopt and use mobile technologies. Conducting empirical research to test these hypotheses can provide valuable insights into the factors influencing technology adoption and usage behavior in the specific context of mobile applications or services.

Research Method

This study employs a structural equation modeling (SEM) strategy to construct a model that depicts the interconnections among the six variables under investigation: *Mobile Usefulness, Mobile Ease of Use, Social Influence, Facilitating Condition*, *Actual Use*, and *Intention to Use*. Extensive prior relevant research was reviewed to ensure an all-encompassing collection of measurements. All measurements for each construct were adapted from pre-validated tools and suitably modified to align with the context of mobile technologies.

Data were procured through a survey questionnaire encompassing inquiries regarding demographic attributes and multiple items related to each variable within the research framework. Each statement was gauged on a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). The research dataset was collected from 566 customers of PT PLN (Persero) ULP Jeneponto.

After distributing questionnaires to respondents (PLN customers) in the operational area of PT PLN ULP Jeneponto, the authors conducted a validity test on the collected data. The purpose of the validity test is to measure the accuracy of the instrument used in a study by correlating the scores of each variable with the total scores significantly. In addition to the validity test, a reliability test was also conducted. The reliability test aims to measure the consistency of whether the instrument used can be repeated.

The research model was evaluated utilizing the partial least squares (PLS) methodology, facilitated by the Smart PLS software (Hair et al., 2019). PLS operates as a component-based technique for assessing theoretical research models within the structural equation modeling framework. PLS primarily focuses on prediction rather than confirmation. In contrast to covariance-based techniques such as LISREL, PLS

circumvents the necessity for extensive sample sizes and the assumption of normal distribution for manifest variables. The evaluation of the measurement model entails scrutinizing the convergent and discriminant validity attributes of items and constructs. Subsequently, the structural model is scrutinized through the examination of path coefficients among latent constructs, along with explanatory R2 values. These equations, when combined and analyzed using specialized software, enable researchers to assess and validate complex theoretical models in PLS-SEM.

Result and Analysis

Descriptive Statistics

Respondents are proportionally divided between females (37%) and males (63%). The proportion of males is higher than females. The majority of respondents are aged between 26-45 years, accounting for 73% of the total respondents. Respondents under 12 years contribute only 1%, while the age group 12-25 years reaches 4%. The age group above 46 years contributes 22% of the total respondents. The majority of respondents are entrepreneurs (44%) and private employees (18%). A significant number of respondents are also civil servants (16%) and others (19%).The number of respondents who are students, employees of state-owned or regional-owned enterprises, and private employees is relatively smaller.

Most respondents have incomes in the range of 2,000,000 - 5,000,000 (58%) and 5,000,000 - 10,000,000 (31%). The number of respondents with incomes below 2,000,000 and above 10,000,000 is relatively smaller, at 9% and 2%, respectively. Understanding the distribution of these respondent characteristics allows us to identify patterns and trends that may influence the results or interpretations of a study or survey involving this respondent group.

Validity and Reliability Result

Several validity tests were conducted using SmartPLS, including Factor Loadings and Average Variance Extracted (AVE). Most of the factor loadings of the items for each construct in the measurement model are over 0.70 each construct should have Average variance extracted (AVE) value over 0.50 for convergent validity (Moores et al., 2012). The results indicate that the outer loadings of each indicator are above 0.7, signifying the validity of all indicators. Additionally, each variable has an AVE greater than 0.5, indicating its validity as well.

Table 1. Loading Factors

Indicators	Outer loadings
AU <- Actual Use	1,000
FC1 <- Facilitating Condition	0.922
FC2 <- Facilitating Condition	0.971
FC3 <- Facilitating Condition	0.953
IU1 <- Intention to Use	0.950
IU2 <- Intention to Use	0.968
IU3 <- Intention to Use	0.975
IU4 <- Intention to Use	0.959
MEOI1 <- Mobile Ease Of Use	0.854
MEOI2 <- Mobile Ease Of Use	0.913
MEOI3 <- Mobile Ease Of Use	0.900

Indicators	Outer loadings
MEOI4 <- Mobile Ease Of Use	0.908
MU1 <- Mobile Usefulness	0.864
MU2 <- Mobile Usefulness	0.885
MU3 <- Mobile Usefulness	0.936
MU4 <- Mobile Usefulness	0.868
MU5 <- Mobile Usefulness	0.873
SI1 <- Social Influence	0.860
SI2 <- Social Influence	0.935
SI3 <- Social Influence	0.927

Source: Primary Data

Based on Table 1, it can be observed that none of the outer loading values fall below 0.7. For example, the indicator Facilitating condition (FC1) obtains a value of 0.922, which is higher than the standard 0.7 loading factor value. Overall, it can be stated that the questions in the questionnaire are understandable to respondents and valid. The second validity test, by examining the AVE values, can be seen in Table 2 below.

Table 2. AVE

	Average variance extracted (AVE)
Facilitating Condition	0.901
Intention to Use	0.928
Mobile Ease Of Use	0.799
Mobile Usefulness	0.784
Social Influence	0.825

Source : Primary Data

Based on Table 2, it can be observed that each AVE value for each variable is not below 0.5. For instance, the Facilitating condition indicator obtains a value of 0.901, Intention to Use has a value of 0.928, Mobile Ease of Use has a value of 0.799, Mobile Usefulness has a value of 0.784, and Social Influence has a value of 0.825. All these variables have values above 0.5, surpassing the standard AVE value. Consequently, it can be concluded that each variable is not confounded by respondents answering the questionnaire based on questions about other latent variables and is declared valid. The validity test, which has been conducted, is then followed by the reliability test. Reliability tests using SmartPLS are considered reliable if Cronbach's Alpha > 0.7 and Composite Reliability > 0.7. For each Cronbach's Alpha value, none of the variables have a value below 0.7. Specifically, the Facilitating condition indicator obtains a value of 0.945, Intention to Use has a value of 0.974, Mobile Ease of Use has a value of 0.919, Mobile Usefulness has a value of 0.935, and Social Influence has a value of 0.933. All five variables surpass the standard Cronbach's Alpha value of 0.7, indicating that each variable is reliable. Furthermore, it can be observed in the results of the Composite Reliability values for each variable, where none fall below 0.7. Therefore, it can be concluded that all variables are reliable.

Hypothesis Result

The research model depicted in Figure 1 underwent empirical testing using Partial Least Square Analysis conducted by SmartPLS Software. The outcomes of the theoretical

model testing are illustrated in Figure 2. All path coefficients are highly significant at a 5% significance level.

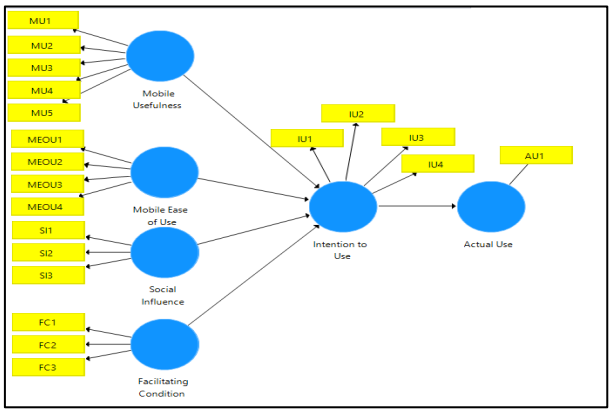

Figure 2. Theoretical model test result

The structural model that has been constructed will undergo an analysis using the results of path coefficient tests and goodness of fit tests. The Path Coefficient values for each independent variable to the dependent variable explain the strength of their influence. As seen in the results in Table 3, the path coefficient value for Facilitating Condition to Intention to Use is 0.327, indicating a positive relationship. The path coefficient value for Intention to Use to Actual Use is 0.772, signifying a positive relationship. The path coefficient value for Mobile Ease of Use to Intention to Use is 0.242, indicating a positive relationship. The coefficient value for Mobile Usefulness to Intention to Use is 0.225, implying a positive relationship. The path coefficient value for Social Influence to Intention to Use is 0.194, suggesting a positive relationship.

To assess the overall strength of the model structure and variance, R^2 (R squared) values are used. The R^2 value indicates the percentage of variability in the dependent variable that can be explained by the independent variables in the model. To meet the criterion of variance strength, the minimum R^2 value should be greater than 0.1 or 10%. In this study, there are two dependent variables: Actual Use and Intention to Use. In the tested model, the R^2 value for Actual Use is 0.597, meaning that Intention to Use contributes 59,7% to Actual Use. Meanwhile, the R^2 value for Intention to Use is 0,851, signifying that all the variables studied contribute to 85,1% of the total variation in Intention to Use.

In this study, all hypotheses are tested based on the t-value (1.960) with a significance level of 5% ($p < 0.05$). The following are the results of the testing for each hypothesis.

Table 3. Hypothesis Result

Hypothesis	Path	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
H1	Mobile Usefulness -> Intention to Use	0.225	0.234	0.100	2.256	0.024
H2	Mobile Ease Of Use -> Intention to Use	0.242	0.243	0.113	2.137	0.033
H3	Social Influence -> Intention to Use	0.194	0.192	0.094	2.063	0040

Hypothesis	Path	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
H4	Facilitating Condition -> Intention to Use	0.327	0.319	0.094	3.481	0.001
H5	Intention to Use -> Actual Use	0.772	0.768	0.034	22.597	0.000

Source : SmartPLS

Based on Table 3, it can be seen that according to the t-stat test, hypothesis testing (H1) in this study, Mobile Usefulness (MU) has a significant influence on Intention to Use (IU), as evidenced by the t-stat value of 2.256 > 1.96 and a p-value of 0.024 < 0.05, indicating the acceptance of H1. This implies that as the usefulness of the New PLN Mobile application increases, customers' intention to use the application also increases. This result is consistent with a previous study by Ugur and Turan (2019) that obtained similar results with the same variables. The findings suggest that the greater the usefulness of the New PLN Mobile application, the likelihood of more customers wanting to use the application in the future. The hypothesis testing (H2) in this study indicates that Mobile Ease of Use (MEOU) significantly influences Intention to Use (IU), with a t-stat value of 2.137 > 1.96 and a p-value of 0.033 < 0.05, leading to the acceptance of H2. This implies that as the ease of use of the New PLN Mobile application increases, customers' intention to use the application also increases. This result aligns with a prior study by Kamal et al. (2020) that obtained similar results with the same variables. The findings suggest that the easier the use of the New PLN Mobile application, the likelihood of more customers wanting to use the application in the future.

The hypothesis testing (H3) in this study shows that Social Influence (SI) significantly influences Intention to Use (IU), with a t-stat value of 2.063 > 1.96 and a p-value of 0.040 < 0.05, leading to the acceptance of H3. This indicates that as the social influence increases, customers' intention to use the application also increases. This result is in line with a previous study by Al Saedi et al. (2020) that obtained similar results with the same variables. The findings suggest that with more social influence, the likelihood of more customers wanting to use the New PLN Mobile application in the future increases. The hypothesis testing (H4) in this study reveals that Facilitating Condition (FC) significantly influences Intention to Use (IU), with a t-stat value of 3.481 > 1.96 and a p-value of 0.001 < 0.05, leading to the acceptance of H4. This implies that as the availability of supporting facilities for using the New PLN Mobile application, such as smartphones and internet access, increases, customers' intention to use the application also increases. This result is consistent with a previous study by Kamal et al. (2020) that obtained similar results with the same variables. The findings suggest that as customers find it easier to obtain adequate facilities, the likelihood of more customers wanting to use the application in the future increases. The hypothesis testing (H5) in this study indicates that Intention to Use (IU) significantly influences Actual Use (AU), with a t-stat value of 22.597 > 1.96 and a p-value of 0.000 < 0.05, leading to the acceptance of H5. This implies that as customers' intention to use the New PLN Mobile application increases, the actual usage also increases. This result is consistent and in line with previous studies conducted by Okoroji et al. (2021) and Vankatesh et al. (2003), which all found a positive and significant effect between the intention to use and the actual use

of information technology. The findings suggest a strong inclination to use the New PLN Mobile application, indicating a high likelihood of future usage.

Conclusion

The analysis of household electricity customer data reveals a significant proportion of economically disadvantaged households in Jeneponto Regency, where the majority benefit from government electricity subsidies. The region's recent removal from the rural area classification underscores the socio-economic challenges it faces. PLN's digital transformation, highlighted by the New PLN Mobile application, reflects the company's commitment to innovation, customer focus, and environmental responsibility.

However, the study recognizes the complexity of introducing electronic services in rural area regions and the necessity of assessing societal readiness for such transformations. The research employs a combination of MTAM and UTAUT frameworks to understand the factors influencing customer readiness in adopting the New PLN Mobile electronic service in Jeneponto Regency.

Moving on to hypothesis testing, the results revealed significant relationships for all of the hypotheses. Mobile Usefulness to Intention to Use (H1), Mobile Ease of Use to Intention to Use (H2), Social Influence to Intention to Use (H3), Facilitating Condition to Intention to Use (H4) and Intention to Use to Actual Use (H5) showed t-stat values respectively, surpassing the standard test value of 1.960. In summary, the empirical testing supported the validity and reliability of the research model. In the results, it can also be observed that the most significant factor influencing Intention to Use is Facilitating Condition.

In essence, the study contributes valuable insights into technology adoption in economically challenged regions, emphasizing the need for a nuanced understanding of user behavior, contextual factors, and the integration of theoretical frameworks. The identified gaps in existing research present opportunities for future exploration, calling for cross-domain comparisons, longitudinal research, and a deeper examination of contextual elements in technology adoption. Overall, the research provides a foundation for addressing the challenges and opportunities associated with digital transformation in regions facing economic constraints.

BIBILIOGRAPHY

Al-Saedi, K., Al-Emran, M., Ramayah, T., & Abusham, E. (2020). Developing a general extended UTAUT model for M-payment adoption. *Technology in Society*, *62*, 101293.

Alghazi, S. S., Kamsin, A., Almaiah, M. A., Wong, S. Y., & Shuib, L. (2021). For sustainable application of mobile learning: An extended UTAUT model to examine the effect of technical factors on the usage of mobile devices as a learning tool. *Sustainability*, *13*(4), 1856.

Arikunto, S. (2016). *Prosedur Penelitian Suatu Pendekatan Praktik*. Renika Cipta.

Batucan, G. B., Gonzales, G. G., Balbuena, M. G., Pasaol, K. R. B., Seno, D. N., & Gonzales, R. R. (2022). An extended UTAUT model to explain factors affecting online learning system amidst COVID-19 pandemic: The case of a developing economy. *Frontiers in Artificial Intelligence*, *5*, 768831.

Binyamin, S. S., & Zafar, B. A. (2021). Proposing a mobile apps acceptance model for users in the health area: A systematic literature review and meta-analysis. *Health Informatics Journal*, *27*(1), 1460458220976737.

Chau, P. Y. K. (1996). An empirical assessment of a modified technology acceptance model. *Journal of Management Information Systems*, *13*(2), 185–204.

Graf, A., Fehring, L., Henningsen, M., & Zinner, M. (2023). Going digital in Germany: An exploration of physicians' attitudes towards the introduction of electronic prescriptions–A mixed methods approach. *International Journal of Medical Informatics*, *174*, 105063.

Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, *31*(1), 2–24.

Kamal, S. A., Shafiq, M., & Kakria, P. (2020). Investigating acceptance of telemedicine services through an extended technology acceptance model (TAM). *Technology in Society*, *60*, 101212.

Lew, S., Tan, G. W.-H., Loh, X.-M., Hew, J.-J., & Ooi, K.-B. (2020). The disruptive mobile wallet in the hospitality industry: An extended mobile technology acceptance model. *Technology in Society*, *63*, 101430.

Moores, K. L., Jones, G. L., & Radley, S. C. (2012). Development of an instrument to measure face validity, feasibility and utility of patient questionnaire use during health care: the QQ-10. *International Journal for Quality in Health Care*, *24*(5), 517–524.

Okoroji, V., Lees, N., & Lucock, X. (2021). *Factors affecting the adoption of mobile applications by farmers: An empirical investigation*.

Rafique, H., Almagrabi, A. O., Shamim, A., Anwar, F., & Bashir, A. K. (2020). Investigating the acceptance of mobile library applications with an extended technology acceptance model (TAM). *Computers & Education*, *145*, 103732.

Sugiarto. (2022). *Metodologi Penelitian Bisnis* (Edisi 2). Yogyakarta: Andi.

Uğur, N. G., & Turan, A. H. (2019). Mobile applications acceptance: a theoretical model proposal and empirical test. *International Journal of E-Adoption (IJEA)*, *11*(2), 13–30.

Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User Acceptance of Information Technology: Toward a Unified View. *MIS Quarterly*, *27*(3), 425. https://doi.org/10.2307/30036540