DIJEMSS: Dinasti International Journal of Education Management and Social Science
E-ISSN: 2686-6331
P-ISSN: 2686-6358
DINASTI PUBLISHER
https://dinastipub.org/DIJEMSS dinasti.info@gmail.com +62 811 7404 455
DOI: https://doi.org/10.38035/dijemss.v7i1
https://creativecommons.org/licenses/by/4.0/
Received: 14 July 2025 | **Revised:** 19 September 2025 | **Accepted:** 29 September 2025

The Effect of the Technology Acceptance Model and Theory of Planned Behavior on the Use of the New PLN Mobile Application

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Abstract: The New PLN Mobile application developed by PT PLN (Persero) aims to facilitate customers in accessing various electricity services, such as bill payments, purchasing electricity tokens, and submitting electricity service requests. Although widely downloaded, feature adoption and utilization remain suboptimal, especially among Generation Y. This study aims to analyze the factors influencing the acceptance of the application, such as perceived ease of use, perceived usefulness, perceived risk, and subjective norm, using the Technology Acceptance Model (TAM) and Theory of Planned Behavior (TPB) framework. The study also investigates how these factors influence users' attitudes, behavioral intentions, and actual system use of the New PLN Mobile application among Generation Y. A survey was conducted with 150 respondents from Generation Y in Jakarta. The research approach used a quantitative method with data analysis using Structural Equation Modeling (SEM-PLS). The results of the study indicate that all the factors tested—perceived ease of use, perceived usefulness, perceived risk, and subjective norm—have a significant effect on users' attitudes and their intention to use the application, which ultimately influences the actual use of the application. These findings are expected to provide deeper insights into the factors that drive technology adoption, especially among Generation Y, and offer practical recommendations for application developers to enhance user engagement. These findings highlight the need for apps that are easy to use, beneficial, secure, and socially supported to improve user engagement and satisfaction. Additionally, strategic targeting of Generation Y with engaging and relevant features, such as gamification and social media integration, can help increase sustainable application use.

Keywords: Actual Use, Attitude Toward Use, Behavioral Intention, Generation Y Perceived Ease Of Use, Perceived Risk, Perceived Usefulness, Subjective Norm

INTRODUCTION

The PLN Mobile application is designed to simplify various electricity transactions for customers, such as bill payments and purchasing electricity tokens (Octavianto & Raharjo, 2023). By 2023, the app had 4 million active users, though most features remained underutilized (Syaifuddin et al., 2024). The younger generation is one group with the potential to increase adoption of this application, as they are more open to new technologies (Rindy et al., 2024).

However, the application's ease of use and benefits remain major challenges in attracting more active users (Ilham & Zarnelly, 2021).

Data on new downloads and transactions of the PLN Mobile application in 2023 shows a significant increase.

Table 1. New PLN Mobile downloader data for 2023 at PLN Jakarta

Month	Realization	Target	% Achievement
Jan 2023	4,125,000	4,132,000	99.83%
February 2023	4,131,000	4,143,000	99.71%
Mar 2023	4,143,000	4,154,000	99.75%
Apr 2023	4,157,000	4,164,000	99.82%
May 2023	4,221,000	4,175,000	101.09%
June 2023	4,328,000	4,186,000	103.40%
Jul 2023	4,382,000	4,195,000	104.46%
Aug 2023	4,519,000	4,203,000	107.52%
Sep 2023	4,626,000	4,212,000	109.82%
Oct 2023	4,679,000	4,239,000	110.39%
Nov 2023	4,696,000	4,247,000	110.57%
Dec 2023	4,701,000	4,256,000	110.46%

Table 1 shows that the PLN Mobile app had 4,701,000 downloads by the end of December 2023, exceeding the target set by PLN Jakarta. This achievement demonstrates the growing importance of the New PLN Mobile app as a tool to facilitate customer management of their electricity services and indicates the growing adoption of digital technology among PLN customers.

Table 2. Transaction Targets

Year	Number of Downloaders	Number of Transactions/Year	Number of Transactions/Month	% Downloader Transactions per Month
2024	4,701,000	2,111,880	175,990	3.74%
2025	4,701,000	5,038,584	419,882	8.93%

In 2024-2025, although the number of PLN Mobile app downloads is expected to stagnate at 4,701,000, the transaction target shows a significant increase. Table 2 reveals that recorded annual transactions increased rapidly from 2,111,880 transactions per year (175,990 transactions per month) in 2024 to 5,038,584 transactions per year (419,882 transactions per month) in 2025. This increase reflects changes in user behavior in utilizing PLN's digital services (Syaifuddin et al., 2024).

To analyze the factors influencing application adoption, the Technology Acceptance Model (TAM) and Theory of Planned Behavior (TPB) frameworks can be used. Factors such as perceived ease of use and perceived usefulness have been shown to positively influence user attitudes and intentions to use an application, ultimately leading to more actual system usage (Davis, 1989). In this case, the increase in transactions reflects that users are beginning to perceive the benefits and convenience of the New PLN Mobile application, which makes them more active in using it.

Ease of interface and features is key to adoption. Users who perceive an app as easy to use tend to have a higher intention to use it (Davis, 1989). Research by Pratiwi & Oktarina (2020) and Ilham & Zarnelly (2021) shows that this ease of use fosters positive attitudes toward the app, which ultimately increases app usage intentions and behavior. This is crucial to ensure that apps remain easily accessible and usable by a wide range of users, including younger generations.

Perceived usefulness (PU) plays a crucial role in shaping user attitudes and intentions toward an application. Users who perceive an application as providing tangible benefits, such as simplifying electricity bill payments, are more likely to develop a positive attitude toward the application (Hamzah & Irawan, 2023). Research by Octavianto & Raharjo (2023) also shows that applications perceived as useful are used more frequently, increasing user efficiency and effectiveness. Thus, perceived usefulness is a key predictor of positive attitudes toward an application.

However, there are also risk factors that need to be considered, namely perceived risk (PR). If users perceive an application to pose high risks, such as security and privacy issues, their attitudes toward the application can become negative, reducing their intention to use it (Chen & Lai, 2021). Research by Ikhsan (2020) shows that perceived risk influences application usage intentions and behavior. Therefore, it is important for PLN to clearly communicate the application's security features to ensure users feel safe and comfortable when using the New PLN Mobile application.

Subjective norm (SN), or social influence, also plays a significant role in app adoption. The TPB theory states that if individuals perceive that those around them support their use of an app, they are more likely to adopt it (Ajzen, 2012). Research by La Pade & Prayoga (2023) shows that social support can strengthen app usage intentions. In the context of PLN Mobile, support from family or friends who have already used the app can influence users' attitudes and intentions to adopt it.

A positive attitude toward an application plays a significant role in determining a user's intention to use it. Research by Syaifuddin et al. (2024) shows that a positive attitude toward an application is more influential on user intention than other factors. This positive attitude can be achieved through a good user experience and the development of app features that better meet customer needs, as suggested by research by Park & Ahn (2021).

Behavioral intention is also a key predictor of actual app usage (Ajzen, 2020). To increase user intention, PLN needs to improve the app's usability and usability and strengthen communication about its value-added features. Research by Umar & Pasaribu (2024) emphasized that strategies to increase behavioral intention, such as improving the user interface and introducing new features, can directly impact app usage.

This research provides practical contributions to the development of public service applications, including the New PLN Mobile Application. By understanding the factors influencing application adoption, this study offers recommendations for PLN, such as improving usability and strengthening communication about application security. This aligns with research by Wang et al. (2023), which emphasizes the importance of usability and effective communication in increasing technology adoption. These findings also contribute to the development of technology applications in the energy and public service sectors more broadly, as suggested by Cham et al. (2021).

METHOD

This study uses a quantitative approach with an explanatory research approach aimed at identifying the main determinant variables that predict certain constructs. Quantitative methods are used to study specific populations or samples and are based on the philosophy of positivism (Sugiyono, 2024). This study aims to explain the relationships between constructs (work motivation, organizational justice, job satisfaction, and organizational citizenship behavior) and

understand the interrelationships between these variables. To analyze the data, the authors used SEM-PLS, because this research is explanatory and requires indicators and a structural measurement model (Kurniawan & Yamin, 2011).

The population in this study is all New PLN Mobile app users residing in Jakarta, specifically Generation Y (millennial) customers, known as a generation that is very familiar with technology and digitalization. The millennial generation, born between 1981 and 1996, was chosen because in 2025 they will be between 29 and 44 years old (Iswariyadi et al., 2023). Based on the 2020 Population Census data from the Central Statistics Agency, Generation Y dominates the Indonesian population, making it a relevant user segment for the app to study. This study focuses on analyzing the millennial group as the main representation of New PLN Mobile app users in Jakarta.

The sample in this study was selected using a non-probability technique, which is more appropriate when the population is widely distributed, more cost-effective, and relies on participants' willingness to contribute as respondents (Sekaran & Bougie, 2020). Sample size was determined using the formula proposed by Hair, Sharma, et al. (2024), which considers the number of variables in the research model and the number of respondents required for reliable and representative analysis results. In SEM (Structural Equation Modeling)-based research, this formula is often used to calculate the optimal sample size (Shmueli et al., 2019) with a sample of 150 respondents.

This study categorizes variables into independent and dependent variables, which will be analyzed to understand the influence of independent variables on the dependent variable. The independent variables analyzed are Perceived ease of use and Perceived usefulness, while the dependent variable is the Behavioral intention of New PLN Mobile application users, which is mediated by Attitude toward using. Testing is carried out to see the positive influence of these independent variables on the dependent variable. The data used in this study are primary data obtained from filling out questionnaires by respondents. The data are then analyzed using descriptive analysis techniques and Partial Least Squares – Structural Equation Modeling (PLS-SEM) with SmartPLS® software version 4.0.9.6 to test the proposed hypothesis.

RESULTS AND DISCUSSION

Result

Descriptive analysis of demographic data from 150 respondents in this study provides a general overview of the characteristics of New PLN Mobile application users. The majority of respondents were male (82%), with a dominant age range of 25-34 years (41.3%), most had a bachelor's degree (47.3%), and worked as state-owned enterprise employees (58.7%). In terms of income, the majority of respondents had an income of more than Rp 5 million (96.0%), and most resided in South Jakarta (38.7%) and East Jakarta (27.3%).

The dominant customer type is household users (98.0%), while the most frequent transaction is purchasing electricity tokens (60.0%). This data reflects that the New PLN Mobile app is predominantly used by users with professional backgrounds and middle- to high-income groups, who are generally more familiar with technology and more frequently engage in digital transactions for daily needs, such as bill payments and purchasing electricity tokens.

Outer model

The measurement model aims to determine whether the model used in this study has met the validity and reliability tests before proceeding to the next stage.

Table 1. Results of Convergent Validity Test and Reliability Test

Variables	Indicator	Outer Loading	AVE	Cronbach's Alpha	Composite Reliability
Perceived Ease of Use	PEOU1	0.784	0.654	0.823	0.883
	PEOU2	0.736			
	PEOU3	0.847			
	PEOU4	0.861			
Perceived	PU1	0.884			
	PU2	0.894			

Usefulness	PU3	0.887	0.790	0.911	0.938
	PU4	0.888			
Perceived Risk	PR1	0.733	0.695	0.892	0.919
	PR2	0.882			
	PR3	0.829			
	PR4	0.875			
	PR5	0.842			
Subjective Norm	SN1	0.842	0.697	0.788	0.873
	SN2	0.794			
	SN3	0.867			
Attitude Toward Using	ATU1	0.917	0.863	0.920	0.950
	ATU2	0.926			
	ATU3	0.943			
Behavioral Intention	BI1	0.894	0.782	0.953	0.962
	BI2	0.850			
	BI3	0.879			
	BI4	0.867			
	BI5	0.892			
	BI6	0.874			
	BI7	0.933			
Actual System Use	AU1	0.602	0.703	0.855	0.902
	AU2	0.923			
	AU3	0.910			
	AU4	0.876			

Based on the convergent validity test results shown in Table 1, all indicators in the variables of perceived ease of use, perceived usefulness, perceived risk, subjective norm, attitude toward using, behavioral intention, and actual system use have loading factor values above 0.6 and AVE values above 0.5. This indicates that the measurement model in this study has good convergent validity, meaning that all indicators can effectively measure the intended latent variables. In other words, the indicators used in this model can be relied upon to represent the constructs intended in this study. Furthermore, the results of the discriminant validity test show

that all AVE values for each variable are greater than the correlation between other variables, which indicates that discriminant validity has also been met. This ensures that each latent variable in this research model can differentiate itself well from other latent variables. Furthermore, the reliability test shown in Table 4.7 shows that all latent variables have Cronbach's Alpha and Composite Reliability values higher than the recommended limit values, namely 0.60 for Cronbach's Alpha and 0.70 for Composite Reliability. This indicates that the measurement model used in this study is also reliable, so the results obtained can be trusted and used for further analysis.

Inner model

After all latent variables have passed the validity and reliability tests with valid and reliable results, the next step is to test the structural model, or inner model. Structural model testing is used to evaluate the relationships between latent variables within the research framework. This process includes the R-Square, Effect Size (f-Squared), Q-Square, and hypothesis testing stages.

Table 2. R-Square Test Results and Table 4.10 Q Squared Results

Variables	R-square	Q-square	Information
Attitude Toward Using	0.471	0.392	Moderate Predictive Relevance
Behavioral Intention	0.631	0.487	Moderate Predictive Relevance
Actual System Use	0.399	0.265	Moderate Predictive Relevance

The R-Square test results in this study indicate that the attitude toward using variable can be explained by 47.1% by variables such as perceived ease of use, perceived usefulness, perceived risk, and subjective norm. Meanwhile, the behavioral intention construct can be explained by 63.1%, and actual system use can be explained by 39.9%. This indicates that although these variables have a significant influence, there are still other factors outside the model that can explain variations in the dependent variables. Thus, these results illustrate that the model used in this study has sufficient power in explaining the relationship between variables, although there is room for improvement by considering additional factors.

The Q-Square test conducted to measure the model's reliability in predicting the dependent variables indicates that the model has moderate predictive power. The Q-Square value for attitude toward using is 0.392, for behavioral intention is 0.487, and for actual system use is 0.265. All these values are in the range of 0.25 to 0.50, indicating that the model has a moderate contribution in predicting variations in the dependent variables. This indicates that the model used in this study has moderate predictive relevance and can be used to predict the relationship between the variables studied, although there is potential for further improvement.

Table 3 Hypothesis Test Results

Hypothesis	Influence	Original sample (O)	T statistics	P values	Information
H1	Perceived _Ease of Use -> Attitude _Toward Using	0.302	3,014	0.003	Positive and Significant
H2	Perceived _Usefulness -> Attitude _Toward Using	0.229	2,439	0.015	Positive and Significant
H3	Perceived _Risk -> Attitude _Toward Using	-0.235	3,824	0.000	Negative and Significant
H4	Subjective _Norm -> Attitude _Toward Using	0.239	3,059	0.002	Positive and Significant
H5	Attitude _Toward Using -> Behavioral _Intention	0.303	3,288	0.001	Positive and Significant
H6	Perceived _Ease of Use -> Behavioral _Intention	0.195	2,204	0.028	Positive and Significant
H7	Perceived _Usefulness -> Behavioral _Intention	0.323	3,228	0.001	Positive and Significant
H8	Perceived _Risk -> Behavioral _Intention	-0.078	1,962	0.050	Negative and Significant
H9	Subjective _Norm -> Behavioral _Intention	0.156	2,230	0.026	Positive and Significant
H10	Behavioral _Intention -> Actual _System Use	0.632	10,695	0.000	Positive and Significant
H11	Perceived _Ease of Use -> Attitude _Toward Using -> Behavioral _Intention	0.091	2,131	0.033	Positive and Significant
H12	Perceived _Usefulness -> Attitude _Toward Using -> Behavioral _Intention	0.070	2,014	0.044	Positive and Significant
H13	Perceived _Risk -> Attitude _Toward Using -> Behavioral _Intention	-0.071	2,564	0.010	Negative and Significant
H14	Subjective _Norm -> Attitude _Toward Using -> Behavioral _Intention	0.072	2,387	0.017	Positive and Significant

Discussion

Hypothesis 1: Perceived Ease of Use has a significant positive influence on Attitude Toward Using – Accepted

The results of the study indicate that Perceived Ease of Use has a significant positive influence on Attitude Toward Using. The easier users feel in using the New PLN Mobile application, the more positive their attitude towards the application. A positive path coefficient of 0.302 with a T-Statistic of 3.014 and a P-Value of 0.003 indicates a significant relationship between the application's ease of use and user attitudes. Research by Umar & Pasaribu (2024) supports these results, stating that ease of use plays an important role in increasing the intention to use an application, because it reduces users' psychological barriers to new technology.

Hypothesis 2: Perceived Usefulness has a significant positive influence on Attitude Toward Using – Accepted

Perceived Usefulness (perceived usefulness) shows a significant positive influence on Attitude Toward Using. The path coefficient of 0.229 with a T-Statistic of 2.439 and a P-Value

of 0.015 proves that the perceived usefulness of the application increases the user's positive attitude. This finding points to the importance of improving application functionality to efficiently meet user needs, such as bill reminders or automatic token purchases. Research by Ilham & Zarnelly (2021) also emphasized that Perceived Usefulness has a significant impact on application acceptance, which indicates the importance of perceived usefulness in improving user attitudes towards the application.

Hypothesis 3: Perceived Risk has a significant negative influence on Attitude Toward Using – Accepted

The results of the study indicate that Perceived Risk has a significant negative effect on Attitude Toward Using. With a negative path coefficient of -0.235 and a P-Value of 0.00, the higher the perceived risk towards the application, the more negative the user's attitude towards the application. This is in line with Ha's (2020) research, which shows that perceived risk can influence user intentions to shop online, underscoring the importance of PT PLN to manage perceived risks, such as data security issues, to improve user attitudes towards the application.

Hypothesis 4: Subjective Norm has a significant positive influence on Attitude Toward Using – Accepted

Subjective Norm has a significant positive effect on Attitude Toward Using, with a path coefficient of 0.239 and a P-Value of 0.002. This finding suggests that social support from those around them, such as friends or family, can increase users' positive attitudes toward the app. This supports research by Hamzah & Irawan (2023), which found that social influence has a significant impact on app usage intention, underscoring the importance of social influence in accelerating the adoption of new technology apps like New PLN Mobile.

Hypothesis 5: Attitude Toward Using has a significant positive influence on Behavioral Intention – Accepted

Attitude Toward Using has a significant positive effect on Behavioral Intention, with a path coefficient of 0.303 and a P-Value of 0.001. This finding supports the Theory of Planned Behavior (TPB), which states that attitudes toward a technology greatly influence behavioral intentions to adopt it. Research by Wiprayoga et al. (2023) shows that positive attitudes toward applications influence behavioral intentions to use technology, indicating that positive attitudes toward the PLN Mobile application can increase users' intentions to use it in the future.

Hypothesis 6: Perceived Ease of Use has a significant positive influence on Behavioral Intention – Accepted

This study shows that Perceived Ease of Use has a significant positive effect on Behavioral Intention. With a path coefficient of 0.195 and a P-Value of 0.028, this finding indicates that the easier users perceive an application to be, the greater their intention to use it in the future. This finding supports research by Gunadi & Darma (2022), which shows that ease of use has a significant effect on behavioral intention and application usage, underscoring the importance of an easy-to-use interface in increasing users' intention to continue using an application.

Hypothesis 7: Perceived Usefulness has a significant positive influence on Behavioral Intention – Accepted

Perceived Usefulness has a significant positive effect on Behavioral Intention, with a path coefficient of 0.323 and a P-Value of 0.001. This finding indicates that the more useful an application is to users, the greater their intention to use it in the future. Research by Ikhsan (2020) and Aditya (2022) supports this finding, confirming that perceived usefulness plays a

crucial role in shaping users' intention to continue using an application, especially when the application makes their daily lives easier.

Hypothesis 8: Perceived Risk has a significant negative influence on Behavioral Intention – Accepted

Perceived Risk has a significant negative effect on Behavioral Intention, with a path coefficient of -0.078 and a P-Value of 0.050. This finding indicates that the higher the perceived risk users have towards the application, the lower their intention to use it. Research by Ha (2020) shows that perceived risk negatively influences users' intention to shop online, which is similar to this finding in the context of the New PLN Mobile application. Therefore, PT PLN needs to focus on reducing perceived risk by strengthening its application security and service quality.

Hypothesis 9: Subjective Norm has a significant positive influence on Behavioral Intention – Accepted

Subjective Norm has a significant positive effect on Behavioral Intention, with a path coefficient of 0.156 and a P-Value of 0.026. This finding suggests that social influence from people around users can influence their intention to use the New PLN Mobile application. Research by Hamzah & Irawan (2023) supports this finding, emphasizing that social influence plays a significant role in shaping behavioral intentions to use the application. Therefore, PT PLN can leverage this subjective norm by involving users in social campaigns or through recommendations from people they trust.

Hypothesis 10: Behavioral Intention has a significant positive influence on Actual System Use – Accepted

The results of this study indicate that Behavioral Intention has a significant positive influence on Actual System Use, with a path coefficient of 0.632 and a P-Value of 0.000. Research by Pratiwi & Oktarina (2020) also found that user intention to use the PLN Mobile application has a significant influence on the use of the application. This finding emphasizes the importance of user behavioral intention as a key predictor in increasing actual application usage, indicating that the intention to use the application must be maintained and improved so that application usage can increase.

Hypothesis 11: Perceived Ease of Use has a significant positive influence on Behavioral Intention through Attitude Toward Using – Accepted

The results of the study show that Perceived Ease of Use has a significant positive effect on Behavioral Intention through Attitude Toward Using, with a path coefficient of 0.091 and a P-Value of 0.033. This finding indicates that ease of use not only directly influences user intentions but also influences their intentions through changes in positive attitudes towards the application. Research by Gunadi & Darma (2022) supports this finding, which shows that ease of use influences users' attitudes and behavioral intentions to use the application.

Hypothesis 12: Perceived Usefulness has a significant positive influence on Behavioral Intention through Attitude Toward Using – Accepted

Perceived Usefulness has a significant positive effect on Behavioral Intention through Attitude Toward Using, with a path coefficient of 0.070 and a P-Value of 0.044. This finding indicates that perceived usefulness influences users' intention to use the application in a way that is mediated by their attitude toward the application. Research by Ilham & Zarnelly (2021) and Hamzah & Irawan (2023) supports this finding, which confirms that perceived usefulness is very important in shaping users' attitudes and increasing their intention to continue using the application.

Hypothesis 13: Perceived Risk has a significant negative influence on Behavioral Intention through Attitude Toward Using – Accepted

Perceived Risk has a significant negative effect on Behavioral Intention through Attitude Toward Using, with a path coefficient of -0.071 and a P-Value of 0.010. This finding indicates that high perceived risk decreases users' positive attitudes, which in turn reduces their intention to use the application. Research by Ha (2020) and Yao et al. (2024) supports this finding, showing that perceived risk plays a significant role in reducing users' intention to adopt new technologies, underscoring the importance of risk mitigation in application use.

Hypothesis 14: Subjective Norm has a significant positive influence on Behavioral Intention through Attitude Toward Using – Accepted

Subjective Norm has a significant positive effect on Behavioral Intention through Attitude Toward Using, with a path coefficient of 0.072 and a P-Value of 0.017. This finding suggests that social influence plays a significant role in increasing users' behavioral intention to use the application. Research by Widiar et al. (2023) also supports this finding, showing that subjective norms play a significant role in users' decisions to adopt new technologies.

Table 4. Managerial Implications

Analysis Tools	Findings	Managerial Implications	Intended
Demographic Analysis	The majority of respondents were male, aged 29-34, income >Rp 5,000,000, domiciled in South/East Jakarta	Customize the app with a masculine design and premium features. Focus promotions on the male segment, aged 29-34, with high incomes.	New PLN Mobile application users
Exposure Analysis	Users exposed to good app performance are more engaged, social influence increases engagement	Focus on optimal application performance, add social sharing and responsive features.	New PLN Mobile application users
PLS-SEM	Perceived ease of use, perceived usefulness, perceived risk, subjective norms influence ATU	Focus on ease of use, benefits, risk reduction, and social influence to increase positive user attitudes.	New PLN Mobile application users
PLS-SEM	Attitude toward using influences behavioral intention to use the application	Improve the user experience to strengthen app usage intentions. Focus on features that enhance user experience.	
PLS-SEM	PEOU, PU, PR, SN have a direct influence on behavioral intention	Simplify the interface, add useful features, reduce risks, and leverage social influence to increase user intent.	
PLS-SEM	Behavioral intention influences actual system use	Focus on increasing user intent to continue using the app with more useful features and enjoyable experiences.	

PLS-SEM	PEOU, PU, PR, SN have an indirect effect on behavioral intention through ATU	Ensure ease of use, benefits, risk reduction, and social norms to build positive attitudes and strengthen user intentions.

Based on demographic analysis findings, app managers need to adapt the app's appearance and features to meet the preferences of the majority of productive-age, high-income users. The New PLN Mobile app should focus on simplifying the interface and adding premium features to enhance the experience for higher-income users. Furthermore, it's crucial to optimize app performance and strengthen social elements, such as recommendations from friends or family, to increase user engagement. Marketing strategies should target user segments engaged in social communities and offer relevant promotions based on social influence.

Findings from the PLS-SEM test indicate that factors such as ease of use, perceived usefulness, and social influence play a significant role in improving user attitudes and their intention to continue using an app. Therefore, app developers should focus on developing apps that are not only easy to use but also provide tangible benefits to users. This includes reducing perceived risks and increasing user confidence in the app's security and performance. In terms of marketing, strategies that incorporate social elements and highlight the app's benefits can help strengthen positive attitudes and users' intention to use the app more intensively.

CONCLUSION

The results of the study indicate that perceived ease of use, perceived usefulness, and subjective norms have a significant positive influence on attitudes toward using the New PLN Mobile Application, while perceived risk has a significant negative influence on these attitudes. The easier the application is to use, the greater the perceived benefits, the lower the perceived risks, and the higher the social influence received, the more positive the user's attitude toward the application. Therefore, application developers must ensure that the application is easy to use, provides real benefits, reduces potential risks, and strengthens social elements.

This study also revealed that attitude toward use has a significant positive influence on behavioral intention to use the New PLN Mobile application. The more positive a user's attitude toward the application, the higher their intention to use it. To encourage user behavioral intention, developers must create a pleasant user experience that can strengthen their intention to use the application continuously.

Furthermore, perceived ease of use, perceived usefulness, perceived risk, and subjective norm showed a significant positive influence on behavioral intention to use the New PLN Mobile application, with perceived risk having a negative influence. This underscores the importance of managing each of these factors in application design to increase user intention to use the application more intensively, particularly in increasing ease of use, usefulness, social influence, and reducing perceived risk.

Furthermore, behavioral intention to use was shown to have a significant positive influence on actual system use of the New PLN Mobile application. This finding suggests that user intention to use an application directly contributes to actual application usage. Therefore, developers need to ensure that formed intentions can be translated into actual usage through a good user experience.

This study also confirmed that perceived ease of use, perceived usefulness, and subjective norms indirectly influence behavioral intention to use the New PLN Mobile application through attitude toward use. Conversely, perceived risk also indirectly influences user behavioral intention. Developers should consider these factors to create positive attitudes that strengthen users' intention to adopt the application.

While this study provides important insights into the factors influencing the adoption of the New PLN Mobile App, several limitations are worth noting. One is its focus on Generation Y app users residing in Jakarta, so the results may not be fully generalizable to other age groups or regions. Furthermore, the non-probability sampling technique employed relied on respondents' willingness to participate, which may impact the sample's representativeness. This study also failed to consider external factors such as policy influences or technological changes that could impact user behavior in the long term. Therefore, further research with a more diverse sample and considering external factors would be beneficial to obtain a more comprehensive picture of the adoption of this type of app.

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