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Research Article

The Effect of Perceived Ease of Use and Perceived Usefulness on Customer Satisfaction and Behavioral Intention toward the PLN Mobile Application at PT PLN (Persero), Bali Distribution Main Unit

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Abstract: Analyzing the influence of *perceived ease of use* and *perceived usefulness* on *customer satisfaction* and *behavior intention* of the PLN *Mobile application* at the Office of PT. PLN (persero) Bali Distribution Main Unit. Design/methodology/approach: A type of quantitative research, using a pre-existing measurement scale related to PLN *Mobile, perceived ease of use*, *perceived usefulness*, *behavior intention* and *customer satisfaction*. Involving a sample of 160 consumers of PT. PLN (persero) Bali Distribution Main Unit, with an analysis tool for the use of the PLS SEM model. Findings: The results of the analysis showed that *perceived usefulness* and *customer satisfaction* had a positive and significant effect on *behavior intention* at the PT. PLN (Persero) Bali Distribution Main Unit, *perceived ease of use* had no effect on *behavior intention* at the PT. PLN (Persero) Bali Distribution Main Unit while *perceived usefulness* has a positive and significant effect on *behavior intention* at the PT. PLN (Persero) Bali Distribution Main Unit. *Perceived ease of use* has no effect on *behavior intention* at PT. PLN (Persero) Bali Distribution Main Unit through *customer satisfaction* and *perceived usefulness* affects the *behavior intention* at the PT. PLN (Persero) Bali Distribution Main Unit through *customer satisfaction*. Practical/implications: *perceived usefulness* and *customer satisfaction* should remain the concern of the PT. PLN (Persero) Bali Distribution Main Unit because with a commitment to organization, *perceived usefulness* and *good customer satisfaction*, it is hoped that *behavior intention* will also increase. Originality/value: This study used *customer satisfaction variables* as a mediating variable on the influence of *perceived ease of use* and *perceived usefulness* on *behavior intention* using path analysis.

Keywords: Behavioral Intention; Customer Satisfaction; Perceived Ease of Use; Perceived Usefulness; PLN Mobile Application.

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1. Introduction

The era of digitalization that is developing so rapidly requires every company to carry out digital transformation, including PT PLN (Persero) as a national electricity service provider company in Indonesia is also aggressively carrying out digital transformation within the company. This is strengthened by the existence of Presidential Instruction No. 3 of 2003 concerning National Policies and Strategies for the Development *of e-Government*, Law No. 25 of 2009 concerning Public Services, Presidential Regulation (Perpres) No. 81/2010 concerning *the Grand Design* of National Bureaucratic Reform, to Presidential Regulation No. 95 of 2018 concerning Electronic-Based Government Systems. Responding to these demands, PLN developed an information technology-based service product, namely the PLN *Mobile Application,* which is a service transformation that focuses on customer needs (*customer focused*), which is a strategy applied to serve customers better.

The purpose of implementing this application is to realize the digitization of consumer electricity services, meeting consumer needs easily, quickly, accurately, and transparently. In addition, this application also has advantages over previous service systems because it is *real-time action*, dynamic and more accurate results. The PLN *Mobile* application is expected to make it easier for customers to obtain services by offering service access independently with an easily accessible feature design, thereby helping customers to cut procedures that allow

customers to get services without direct interaction without reducing the quality of PLN services.

PLN's customer service system before the launch of the PLN *Mobile* application used a very conventional system where customers went directly to the nearest PLN service office. Furthermore, PLN developed the *Call Center* 123 system where when customers have problems with PLN services, they can contact *the Call Center* 123. However, along with the development of technology, this system is considered less effective because if customers contact *Call Center* 123, they are charged a fee that burdens the customer so that customers choose the conventional method by visiting the nearest PLN service office. This is certainly very inefficient and slows down service to customers. Moreover, in 2019 there was a Covid-19 pandemic condition, where face-to-face services were very limited. So that this moment was used by PLN to encourage customer service indirectly, by *launching* the PLN *Mobile* application on December 18, 2020. The PLN *Mobile* application is expected to reduce face-to-face customer service without reducing the level of quality and quality of service.

Since this application was launched in 2020, the number of PLN *Mobile* users has shown significant growth. It's just that the conditions until now the interest of customers to use the PLN *Mobile application* is still not optimal even though the benefits of this application are very large for customers ranging from electricity bill payments, interference complaints, to the purchase of prepaid electricity tokens. Until January 2025, the number of customers who have *downloaded* the PLN *Mobile* application in Bali is 1,730,890 from the number of customers of PT. PLN (Persero) UID Bali in 2024 will be 1,796,683 customers (96.34%). The active users of the PLN *Mobile* application until January 2025 are 121,475 customers (7.02%) of customers who have *downloaded* the PLN *Mobile application*. And the number of transactions on the PLN *Mobile* application until January 2025 is 793,473 times. PT. PLN (Persero) Bali Distribution Main Unit conducts a customer survey to find out customer satisfaction with the use of PLN *Mobile*.

Application use intention (*Behavior Intention*) is the main indicator of PLN *Mobile*'s success in meeting customer needs. In this case, application intention to use not only includes a willingness to download and try the application, but also a desire to use the application continuously. Kotler and Keller (2021:137) state that *behavior intention* is consumer behavior that arises in response to an object that indicates a person's desire to make a purchase. Meanwhile, the definition of *behavior intention* according to Sciffman and Kanuk (2021:228) is a model of a person's attitude towards an object of goods that is very suitable in measuring attitudes towards certain types of products, services, or brands, (Solihin 2020). A person's behavior is highly dependent on his or her interests. While interest in behavior is highly dependent on attitudes and subjective norms of behavior. Belief in the consequences of behavior greatly influences his or her subjective attitudes and norms. Individual attitudes are formed from a combination of beliefs and evaluations of important beliefs of a consumer. While subjective norms are determined by beliefs and motivations.

The research gap in this study is based on differences in the results of previous research regarding the effect of perceived ease of use and perceived usefulness on behavior intention and customer satisfaction. Research by Yosep (2021), Feliana (2022), Salim (2023) and Agustina (2024) which stated that perceived ease of use has a positive effect on behavior intention. In contrast to the research of Adi (2024) which stated that perceived ease of use has no effect on behavior intention. Research conducted by Setyawati (2020), Siagian (2022), Aditya (2022) and Liestya (2023) stated that perceived usefulness has a positive effect on behavior intention. In contrast to the research of Alfredo (2023) which stated that perceived usefulness has no effect on behavior intention. Research by Anugrah (2020), Emba (2022), Milla & Wenti (2023) and Fauzi & Maria (2024) which stated that perceived ease of use has a positive effect on customer satisfaction. In contrast to the research of Muliawan (2023) which stated that perceived ease of use has no effect on customer satisfaction. Research conducted by Wiwoho (2020), Rakhmat (2020), Indah (2020) and Nuria, et al., (2023) which stated that perceived usefulness has a positive effect on customer satisfaction. In contrast to the research of Tandon (2021) which stated that perceived usefulness has no effect on customer satisfaction.

The results of the presentation of problems on the phenomenon of using the PLN Mobile application and research gap can be shown to be the research problems are: Does perceived ease of use and perceived usefulness affect customer satisfaction and behavior

intention of the PLN Mobile application at the Office of PT. PLN (Persero) Bali Distribution Main Unit.

2. Literature Review

Technology Acceptance Model (TAM)

Concept *Technology Acceptance Model* (TAM) developed by Davis in 1989 offers a theory as a basis for studying and understanding user behavior in receiving and using information systems (Devi and Suartana, 2019). The expansion of the concept is expected to help predict a person's attitude and acceptance of technology and can provide the necessary fundamental information about the factors that drive the individual's attitude.

Technology Acceptance Model (TAM) states that system users are likely to use the system if the system is easy to use and useful to him (Devi and Suartana, 2019). In TAM, the acceptance of SIA users is determined by two key factors, namely *perceived usefulness* and *perceived easy of use*. Perceived Usefulness (*perceived usefulness*) is an individual's level of confidence that the use of technology will improve his or her work, and the perception of ease of use (*perceived ease of use*) is an individual's level of confidence that the use of technology makes it easier to get the job done.

Perceived ease of use dan customer satisfaction

Widiyanti (2020) stated that *perceived ease of use* is the perception that a new technology is easy to understand, easy to use, easy to reach and practical in its use. Adyas (2021) states that *perceived ease of use* is a system designed not to make it difficult for the user, but the use of the system actually makes it easier for someone to complete their work. Research by Anugrah (2020), Emba (2022), Milla & Wenti (2023) and Fauzi & Maria (2024) states that *perceived ease of use* has a positive effect on *customer satisfaction.* Based on theoretical studies and previous research results, the following hypotheses can be formulated:

Hypothesis 1: *Perceived ease of use* has a positive effect on *customer satisfaction*

Perceived usefulness dan customer satisfaction

Size et al (2019) asserts that if users feel real benefits from the use of technology, such as accounting information systems, then they will be more likely to use it, which ultimately improves individual performance. Research conducted by Wiwoho (2020), Rakhmat (2020), Indah (2020) and Nuria, et al., (2023) states that *perceived usefulness* Positive Influence on *customer satisfaction*. Based on theoretical studies and previous research results, the following hypotheses can be formulated.

Hypothesis 2: *Perceived usefulness* has a positive effect on *customer satisfaction*

Perceived ease of use dan behavior intention

Perceived ease of use refers to the user's perception of how easy the technology can be used. The easier the technology is to use, the more likely it is to be adopted and utilized optimally. Lee et al., (2020) explained that the perception of ease of using technology encourages users to adapt and master the system more quickly, thereby improving their performance. Research by Yosep (2021), Feliana (2022), Salim (2023) and Agustina (2024) which states *perceived ease of use* has a positive effect on *behavior intention*. Based on theoretical studies and previous research results, the following hypotheses can be formulated

Hypothesis 3; *Perceived ease of use* has a positive effect on *behavior intention*

Perceived usefulness dan behavior intention

Yap et al. (2023) stated that *perceived usefulness* is understood as a way for a person to assume that utilizing certain technologies will help them to improve performance. The new system must offer better utility than the previous one (Oloveze et al., 2022). Likewise, according to Hasan (2022), a person's behavioral intention to use a system will be strengthened when a system has several benefits such as making it easier to organize work, being more useful, and increasing productivity. Therefore, a person will use technology if he or she finds it useful. Research conducted by Setyawati (2020), Siagian (2022), Aditya (2022) and Liestya (2023) states that *perceived usefulness* has a positive effect on *behavior intention*. Based on theoretical studies and previous research results, the following hypotheses can be formulated:

Hypothesis 4: *Perceived usefulness* has a positive effect on *behavior intention*

Customer satisfaction dan behavior intention

According to Kotler (2021), customer *satisfaction* is defined as a level where the product is perceived to be in accordance with the buyer's expectations. *Customer satisfaction* with the purchase depends on the actual performance of the product, so it is in accordance with the buyer's expectations. Customers have various levels of satisfaction. If a product is below the buyer's expectations, then the buyer is not satisfied. If it meets expectations, then the customer will feel satisfied. *Customer satisfaction* is the overall attitude towards a good or service after its acquisition and use. In other words, *customer satisfaction* is an evaluative assessment resulting from specific purchase selection. Customer *satisfaction* measurement is very important to do because it provides useful information for companies, investors and customers. Research conducted by Sihombing *et al.,* (2021), Trisna & Hadi (2023), Kartika & Hidayat (2023) and Nugroho & Siti (2024) states that *customer satisfaction* has a positive effect on *behavior intention*. Based on theoretical studies and previous research results, the following hypotheses can be formulated:

Hypothesis 5 = *Customer satisfaction* has a positive effect on *behavior intention*

Perceived ease of use dan behavior intention melalui customer satisfaction

Davis (2021) defines that *perceived ease of use* is the level at which a person believes that the use of a certain system can reduce a person's effort in doing something. Technology can be easy to use in this case it is understood as the ease of using a system or the ease of using the internet to shop (Oloveze et al., 2022). This is considered important in studies related to technology adoption (Hong et al., 2021). *Perceived ease of use* is related to the perception of the end result of the use process (Gusni et al., 2020). Hasan (2022) explained *that perceived ease of use* is understood as the level of user confidence about the use of technology that is free of burdensome business. Research by Yulia & Zuhroh (2022), Stella (2023) and Mariano (2024) states that *perceived ease of use* has a positive effect on *behavior intention* through *customer satisfaction*. Based on theoretical studies and previous research results, the following hypotheses can be formulated;

Hypothesis 6: *Perceived ease of use* has a positive effect on *behavior intention* through *customer satisfaction*

Perceived usefulness dan behavior intention melalui customer satisfaction

Putra & Husna (2021) stated that *perceived usefulness* is the benefit of the system forming a trust for decision-making whether users use the system or not. The perception of usefulness can explain that users who believe that the information system is useful will use it, but on the other hand, if they do not believe that the information system is useful, then the user will definitely not use it Arta & Azizah (2021) stated that *perceived usefulness* is a system that is useful in its use, then many consumers will be more interested and decide to use the service. Consumers who have a high perception of benefit, then they will be motivated to use the system. Widiyanti (2022) stated that *perceived usefulness* is the perception of consumers in a system that can speed up processes, increase effectiveness and productivity, and benefit individuals. Research by Nicholas *et al.,* (2021), Robert (2023) and Mariano (2024) states that *perceived usefulness* has a positive effect on *behavior intention* through *customer satisfaction*. Based on theoretical studies and previous research results, the following hypotheses can be formulated;

Hypothesis 7: *Perceived usefulness* has a positive effect on *behavior intention* through *customer satisfaction*

3. Research Methods

Variables and Measures

There are 4 (four) latent variables involved in this study. All of these latent variables are used as models to determine their simultaneous influences, namely; perceived *ease of use* indicators are adapted from Venkatesh and Davis (2022), *perceived usefulness* indicators are adapted from Himel et al. (2021), *customer satisfaction* is adapted from Indrasari (2021:92) and *behavior intention* indicators are adapted from Mowen (2021). Each latent variable was measured with several items that had been empirically tested and used in previous empirical studies. This study adopted these items. All items as research instruments used five (5) Likert scale points ranging from "strongly disagree with 1 point" to "strongly agree, which is 5 points.

Construct validity and reliability

Validity and reliability tests were conducted on 197 respondents. The validity and reliability test of each construct and dimension indicator was carried out by looking for the significance of correlation and *Cronbach Alpha* per dimension or construct. A construct is declared reliable if it has a *Cronbach Alpha* value exceeding 0.70 (Malhotra 2007). The indicator is declared valid if each indicator score has a significant *bivariate correlation* with the total indicator score. Table 1 *Cronbach Alpha* each construct and dimension shows a value above 0.7, and the significant correlation per item shows positive.

Table 1. Validity and Reliability of the Questionnaire

Variabel	Instrumen	Koefisien Outer Loading	P-Values
Perceived Ease of Use (X_1)	$X_{1.1}$	0,960	0,000
	$X_{1.2}$	0,937	0,000
	$X_{1.3}$	0,964	0,000
	$X_{1.4}$	0,945	0,000
Perceived Usefulness (X_2)	$X_{2.1}$	0,961	0,000
	$X_{2.2}$	0,981	0,000
	$X_{2.3}$	0,974	0,000
	$X_{2.4}$	0,979	0,000
	$X_{2.5}$	0,979	0,000
Customer Satisfaction (Y_1)	$Y_{1.1}$	0,957	0,000
	$Y_{1.2}$	0,969	0,000
	$Y_{1.3}$	0,970	0,000
Behavior Intention (Y_2)	$Y_{2.1}$	0,969	0,000
	$Y_{2.2}$	0,971	0,000
	$Y_{2.3}$	0,969	0,000
	$Y_{2.4}$	0,972	0,000

Based on the presentation of research problems, concepts, theories and results of empirical studies, and hypotheses, the research model can be described as shown in Figure 1.

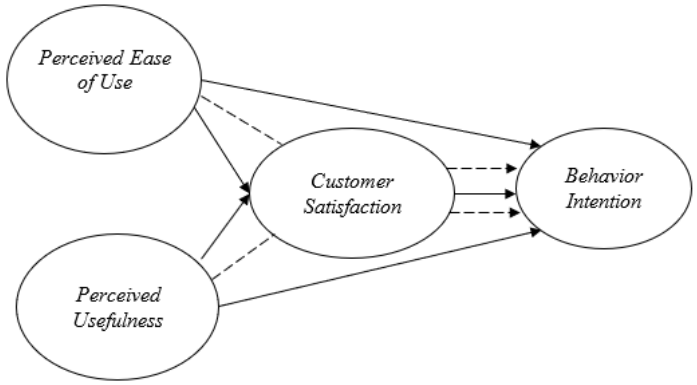


Figure 1. Research Model

Sampling

The determination of the number of samples was carried out based on the rule of Hair (2016), namely the number of indicators multiplied by constants 5 to 10. The number of indicators in this study was 16, by taking constant 10 for reasons of time efficiency so that the number of samples in the study was 16x10=160 people.

Table 2. Characteristics of Respondents

No.	Karakteristik	Jumlah	Persentase (%)
1	Jenis Kelamin		
	Laki-Laki	148 orang	75,1
	Perempuan	49 orang	24,9
2	Pekerjaan		
	Pelajar/Mahasiswa	3 orang	1,5
	Karyawan Swasta	111 orang	56,3
	Wiraswasta	17 orang	8,6
	Lainnya	66 orang	33,6
3	Usia		

	<25 tahun	20 orang	10,2
	26–34 tahun	41 orang	20,8
	35–45 tahun	89 orang	45,2
	45 tahun ke atas	47 orang	23,9
4	Pendidikan		
	SMA/SMK	92 orang	46,7
	Diploma	38 orang	19,3
	S1	61 orang	31,0
	Lainnya	6 orang	3,0
	Total Responden	197 orang	100

4. Results and Discussion

Inferential analysis to test the hypothesis that has been formulated. To test the hypothesis to produce a suitable model, the data is analyzed using *Structural Equation Modelling (SEM),* with a *Partial Least Square (PLS)* approach with the help of *the Smart PLS software application program.*

The results of the analysis output showed that all indicators had a *loading factor* value < 0.70, with p > 0.05 meeting the *convergent validity criteria* (Hair *et al,* 2006). The *Average variance extracted* (AVE) value > 0.50 met the convergent *validity* criteria (Fornell & Larcker, 1981). The composite *reliability result* is said to be good if it has a value above 0.70. This value is in accordance with the criteria of Nunnally (1978). The R Square of the dependent variables, namely *customer satisfaction* and *behavior intention* above 0.75, is relatively strong (Criteria: Chin, 1998; Hair, *et al.* , 2011; Henseler *et al.* , 2009).

Table 3. Discriminant Validity *Examination*

Variabel	Behavior Intention	Customer Satisfaction	Perceived Ease of Use	Perceived Usefulness
Behavior Intention	0,970	—	—	—
Customer Satisfaction	0,952	0,965	—	—
Perceived Ease of Use	0,942	0,947	0,951	—
Perceived Usefulness	0,964	0,960	0,946	0,975

Table 3 shows that the *R-square* value of *the Customer Satisfaction* and *Behavior Intention* variables has strong criteria explained by exogenous variables. *Customer Satisfaction* and *Behavior Intention* have strong criteria. The ability of exogenous variables (*Perceived Ease Of Use* and *Perceived Usefulness*) is relatively strong to be explained by *Customer Satisfaction* and *Behavior Intention* (Chin Criterion 1998; Hair *et al.,* 2011; Henseler *et al.,* 2009).

Tabel 4. Composite Reliability, R-Square

Variabel / Indikator	R-Square	Adjusted R-Square	Nilai
Customer Satisfaction	0,931	0,930	–
Behavioral Intention	0,940	0,939	–
Hasil Perhitungan Q^2	–	–	0,996

The results of the calculation of *Q Square Predictive Relevance* (Q2) showed a value of 0.959 which means that the model showed good observation, where 95.9% of the relationships between variables could be explained by the model, while the rest (1.5%) were *error factors* or other factors that were not included in the research model. The *internal evaluation of the model* measured based on *Q Square Predictive Relevance* (Q2) and *Goodness of Fit* (GoF) above shows that the model formed by constructs has an excellent model category.

Hypothesis Test

The results of the structural model analysis show the relationship between the latent variables adopted as the concept of this research model as shown in Figure 1. and Table 4. Only the effect of *perceived ease of use* on *behavior intention* and *perceived ease of use* through *customer satisfaction* on *behavior intention* has no significant effect. This means that five hypotheses are accepted and two hypotheses are rejected, namely H3 and H6.

Table 5. Hypothesis Test Results

Hubungan Antarvariabel	Hipotesis	Original Sample (O)	T-Statistics	P-Values	Keterangan
Perceived Ease of Use → Customer Satisfaction	H1	0,338	4,841	0,000	Diterima
Perceived Usefulness → Customer Satisfaction	H2	0,637	9,242	0,000	Diterima
Perceived Ease of Use → Behavioral Intention	H3	0,142	1,719	0,087	Ditolak
Perceived Usefulness → Behavioral Intention	H4	0,547	4,993	0,000	Diterima
Customer Satisfaction → Behavioral Intention	H5	0,294	2,185	0,030	Diterima
Perceived Ease of Use → Customer Satisfaction → Behavioral Intention	H6	0,099	1,854	0,065	Ditolak
Perceived Usefulness → Customer Satisfaction → Behavioral Intention	H7	0,187	2,169	0,031	Diterima

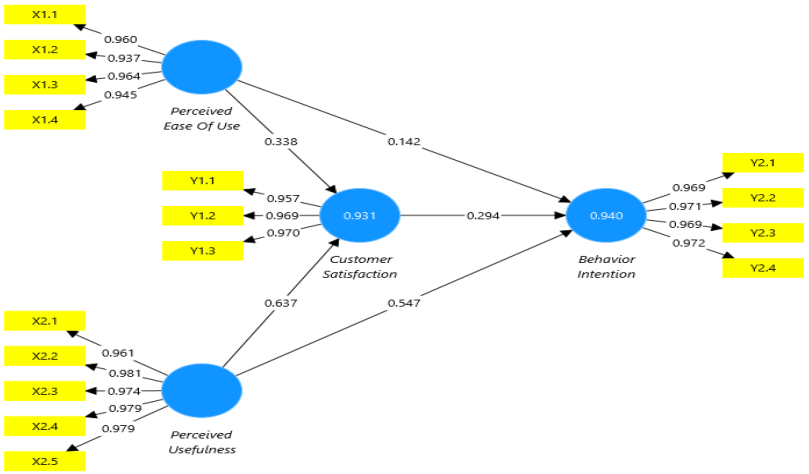


Figure 2. Research Results

The Influence of Perceived Ease of Use on Customer Satisfaction

The results of the analysis show that *perceived ease of use* has a positive and significant effect on *customer satisfaction* at the Office of PT. PLN (Persero) Bali Distribution Main Unit. This means that the better *the perceived ease of use*, the *customer satisfaction* at the PT. PLN (Persero) Bali Distribution Main Unit will increase. Arta & Azizah (2020) stated that *perceived ease of use* is a system designed to make it easier for users and not difficult. This convenience means that a service will be easy to understand and can be easily operated, so that customers will easily learn how to use the service. Widiyanti (2020) stated that *perceived ease of use* is the perception that a new technology is easy to understand, easy to use, easy to reach and practical in its use. Adyas (2021) states that *perceived ease of use* is a system designed not to make it difficult for the user, but the use of the system actually makes it easier for someone to complete their work. Anugrah's research (2020) states that *perceived ease of use* has a positive effect on *customer satisfaction*. This means that the better *the perceived ease of use*, *the better customer satisfaction* will be. This is supported by research conducted by Emba (2022) which states that *perceived ease of use* has a positive effect on *customer satisfaction.* Research by Milla & Wenti (2023) states that *perceived ease of use* has a positive effect on *customer satisfaction.* Ease of use is a factor that can increase customer satisfaction. Fauzi & Maria (2024) stated that *perceived ease of use* has a positive effect on *customer satisfaction.* When users feel that a system is easy to use, intuitive, and does not require much time or effort to learn, they tend to have satisfaction with the system.

The Effect of Perceived Usefulness on Customer Satisfaction

The results of the analysis show that *perceived usefulness* have a positive and significant effect on *customer satisfaction* at the Office of PT. PLN (Persero) Bali Distribution Main Unit. This means that it is getting better *perceived usefulness* throw *customer satisfaction* at the Office of PT. PLN (Persero) Bali Distribution Main Unit will increase. *Perceived usefulness* is an individual's belief that the use of a system or technology will improve their performance at work. (Atchariyachanvanich et al., 2019) introducing this concept in *Technology Acceptance Model* (TAM), where *perceived usefulness* is an important variable that influences the adoption of technology. Rahi et al., (2019) asserts that if users feel the real benefits of using technology, such as accounting information systems, then they will be more likely to use it more often, which ultimately improves individual performance. Size et al (2019) emphasizing that if users feel the real benefits of using technology, such as accounting information systems, then they will be more likely to use it, which ultimately improves individual performance. Research conducted by Wiwoho (2020) states that *perceived usefulness* has a positive effect on *customer satisfaction*. This means that the better *perceived usefulness* throw *customer satisfaction* will get better. This is supported by research by Rakhmat (2020) who states *perceived usefulness* has a positive effect on *customer satisfaction.* When customers feel that the system used really helps them complete tasks more effectively, efficiently, or adds value, then their satisfaction with the system will increase. Indah Research (2020) found that *perceived usefulness* has a positive effect on *customer satisfaction*. In line with the research of Nuria, et al., (2023) which states *perceived usefulness* Positive Influence on *customer satisfaction*. Customers tend to rate a system based on the extent to which it provides tangible benefits in their activities. A system that is considered useful will generate satisfaction because it meets the expectations and needs of users.

Pengaruh Perceived Ease Of Use Terhadap Behavior Intention

The results of the analysis show that *perceived ease of use* has no effect on *behavior intention* at the Office of PT. PLN (Persero) Bali Distribution Main Unit. This means that the change *perceived ease of use* will not cause change *behavior intention* at the Office of PT. PLN (Persero) Bali Distribution Main Unit. *Perceived ease of use* refers to the user's perception of how easy the technology can be used. The easier the technology is to use, the more likely it is to be adopted and utilized optimally. Lee et al., (2020) explained that the perception of ease of using technology encourages users to adapt and master the system faster, thereby improving their performance. This convenience is important in the context of using the PLN application *Mobile*, where a complicated and convoluted process can affect the customer's intention to use the application. The ease of using an application will also affect the use of the PLN application *Mobile* directly. When individuals feel that the application is easy to use and does not require a lot of effort or technical assistance, they will be able to transact more efficiently, so this will increase the utilization of the PLN application *Mobile*. Research by Yosep (2021) states that *perceived ease of use* has no effect on *behavior intention*. Meaning change *perceived ease of use* will not cause change *behavior intention*. This is supported by research conducted by Feliana (2022) stating that *perceived ease of use* has no effect on *behavior intention*. Salim's research (2023) states that *perceived ease of use* has no effect on *behavior intention*. This can happen when users consider that even though the system is easy to use, the system does not provide enough benefits or significant added value. In line with Agustina's (2024) research which states *perceived ease of use* has no positive effect on *behavior intention*. The user not only considers the convenience factor, but also pays attention to the usability aspect (*usefulness*) and overall satisfaction.

The Effect of Perceived Usefulness on Behavior Intention

The results of the analysis show that *perceived usefulness* has a positive and significant effect on *behavior intention* at the Office of PT. PLN (Persero) Bali Distribution Main Unit. This means that the better *the perceived usefulness*, the *behavior intention* at the PT. PLN (Persero) Bali Distribution Main Unit will increase. Yap et al. (2023) stated that *perceived usefulness* is understood as a way for a person to assume that utilizing certain technology will help them to improve performance. The new system must offer better utility than the previous one (Oloveze et al., 2022). Likewise, according to Hasan (2022), a person's behavioral intention to use a system will be strengthened when a system has several benefits such as making it easier to organize work, being more useful, and increasing productivity. Therefore, a person will use technology if he considers it useful. Research conducted by Setyawati (2020) states

that *perceived usefulness* has a positive effect on *behavior intention*. This means that the better *perceived* usefulness, *the better the behavior intention*. This is supported by research by Siagian (2022) who states that *perceived usefulness* has a positive effect on *behavior intention.* Perception of usefulness has an important role in forming *Behavior Intention*, which is a person's desire or tendency to continue using or recommending the system in the future. Aditya's (2022) research states that *perceived usefulness* has a positive effect on *behavior intention.* When users feel real benefits from the system used, such as time efficiency, increased productivity, or ease of completing tasks—they will have a stronger motivation to continue using the system. In line with Liestya's (2023) research, which states that *perceived usefulness* has a positive effect on *behavior intention.* The higher the benefits felt, the higher the consumer loyalty to the system used.

The Effect of Customer Satisfaction on Behavior Intention

The results of the analysis show that *customer satisfaction* has a positive and significant effect on *behavior intention* at the PT. PLN (Persero) Bali Distribution Main Unit. This means that the better *customer satisfaction*, the *behavior intention* at the PT. PLN (Persero) Bali Distribution Main Unit will increase. According to Kotler (2021), *customer satisfaction* is defined as a level where the product is felt in accordance with buyer expectations. *Customer satisfaction* for purchases depends on the actual performance of the product, so it is in accordance with buyer expectations. Customers have various levels of satisfaction. If a product is below the buyer's expectations, then the buyer is not satisfied. If it meets expectations, then the customer will feel satisfied. *Customer satisfaction* is the overall attitude towards a good or service after its acquisition and use. In other words, *customer satisfaction* is an evaluative assessment resulting from specific purchase selection. Customer *satisfaction* measurement is very important to do because it provides useful information for companies, investors and customers. Research conducted by Sihombing *et al.,* (2021) states that *customer satisfaction* has a positive effect on *behavior intention*. This means that the better *customer satisfaction*, the better *the behavior intention*. This is supported by research by Trisna & Hadi (2023), Kartika & Hidayat (2023) and Nugroho & Siti (2024) which states that *customer satisfaction* has a positive effect on *behavior intention*.

The Effect of Perceived Ease of Use on Behavior Intention through Customer Satisfaction

The results of the analysis show that *perceived ease of use* does not affect *behavior intention* through *customer satisfaction*. This means that changes in *perceived ease of use* will not cause changes in *behavior intention* in the Office of PT. PLN (Persero) Bali Distribution Main Unit with *customer satisfaction*. Davis (2021) defines that *perceived ease of use* is the level at which a person believes that the use of a certain system can reduce a person's effort in doing something. Technology can be easy to use in this case it is understood as the ease of using a system or the ease of using the internet to shop (Oloveze et al., 2022). This is considered important in studies related to technology adoption (Hong et al., 2021). *Perceived ease of use* is related to the perception of the end result of the use process (Gusni et al., 2020). Hasan (2022) explained *that perceived ease of use* is understood as the level of user confidence about the use of technology that is loose against burdensome business. Research by Yulia & Zuhroh (2022) states that *perceived ease of use* has no effect on *behavior intention* through *customer satisfaction.* Although users feel that the system is easy to use, it is not strong enough to form satisfaction that has a direct impact on behavioral intention. This is in line with Stella's (2023) research which states that *perceived ease of use* has no effect on *behavior intention* through *customer satisfaction*. Ease of use may be considered basic or should exist, so it does not provide enough added value to encourage sustainable behavior indirectly through customer satisfaction. Mariano's (2024) research states that *perceived ease of use* has no effect on *behavior intention* through *customer satisfaction.* The existence of consumer satisfaction will not lead to an increase in the influence of convenience on consumer loyalty.

The Effect of Perceived Usefulness on Behavior Intention Through Customer Satisfaction

The results of the analysis show that *perceived usefulness* has a positive effect on *behavior intention* through *customer satisfaction*. This means that the better *perceived usefulness* throw *behavior intention* at the Office of PT. PLN (Persero) Bali Distribution Main Unit is getting better with the existence of *customer satisfaction*. Putra & Husna (2021) stated that *perceived usefulness* is the benefit of the system to form a trust for decision-making whether the user will use the system

or not. The perception of usefulness can explain that users who believe that the information system is useful will use it, but on the other hand, if they do not believe that the information system is useful, then the user will definitely not use it Arta & Azizah (2021) stated that *perceived usefulness* is a system that is useful in its use, so many consumers will be more interested and decide to use the service. Consumers who have a high perception of benefits, then they will be motivated to use the system. Widiyanti (2022) stated that *perceived usefulness* is the perception of consumers that a system can speed up processes, increase effectiveness and productivity and benefit individuals. Research Tanugraha (2022) that *customer satisfaction* able to mediate influence *perceived usefulness* against *behavior intention*. When users feel that the system they're using is truly beneficial—helping them complete tasks, improving efficiency, or adding value, they're more likely to feel satisfied with the experience. This is supported by research Febriana et al., (2024) states that *customer satisfaction* able to mediate influence *perceived usefulness* against *behavior intention*. Satisfaction strengthens their intention to return to use or recommend the system in the future. Research Kuswanadji (2024) states that *customer satisfaction* able to mediate influence *perceived usefulness* against *behavior intention*. The existence of consumer satisfaction will cause an increasing influence *perceived usefulness* against *behavior intention*.

5. Conclusion

Managerial and research implications

Perceived usefulness and *customer satisfaction* should remain the concern of the Office of PT. PLN (Persero) Bali Distribution Main Unit because with a commitment to organization, *perceived usefulness* and *good customer satisfaction* , it is hoped that *behavior intention* will also increase.

Limitations and future lines of research

The limitation in this study is that this study uses *cross sectional* and only tests the effect of *perceived ease of use* and *perceived usefulness* on *behavior intention* with *customer satisfaction* as a mediating variable with a sample of 197 respondents.

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