

# DEA Journal of Investment, Development, Economics and Accounting

# ISSN (print) : 3047-3470 & ISSN (online) : 3047-1982

Vol. 1 • No. 2 • September Mei 2024 Pege (*Hal.*) : 230 – 219

ISSN (*online*) : 3047-1982 ISSN (*print*) : 3047-3470

website.: https://ojs.ideanusa.com/index.php/JIDEA

#### © IDEA Nusantara

Darmaguna IDEA Nusantara Foundation JI. Pendowo, Limo No. 69, Depok, Indonesia Telp. 0875 8655 3215 *Email* : ideajournal@ideanusantara.com



http://creativecommons.org/licenses/by/4.0/

# The Influence of User Experience on Decisions PLN Mobile User Purchases

# Tiara Putri<sup>1</sup>; Rangga Gelar Guntara<sup>2</sup>; Adi Prehanto<sup>3</sup>

1,2,3 University of Education, Email: tiaraputri@upi.edu; ranggagelar@upi.edu, adiprehanto2020@upi.edu

ARTICLE INFO	ABSTRACT
Research Paper Article history: Received : July, 2024 Revised : August,2024 Accepted : September, 2024	This study aims to reveal the influence of user experience (UX) quality on purchasing decisions in the PLN Mobile application. Using a quantitative approach, this study analyzes data obtained from 97 active users of PLN Mobile. Data was collected through questionnaires distributed to users who met the criteria of having previously made transactions in the application. The sampling technique used was purposive sampling. The results of simple linear regression analysis show a very significant and positive relationship between the UX variable and purchasing decisions.
Keywords: User Experience; Purchasing Decision; PLN Mobile; Mobile Application; Public Service	can be explained by the UX variable. This finding indicates that the better the user experience, the more likely users are to make purchases through the PLN Mobile application. Thus, this study emphasizes the importance of the role of UX in driving purchasing decisions in public service applications such as PLN Mobile. By taking PLN Mobile as the subject of the study, this study provides a new perspective on the importance of UX in the context of public service applications.
This work is licensed under a	Creative Commons Attribution-Non Commercial 4.0 International

License.



Journal of Investment, Development, Economics and Accounting

ISSN (print) : 3047-3470 & ISSN (online) : 3047-1982

The world today is rapidly evolving, filled with volatility, uncertainty, complexity, and ambiguity, or better known as the VUCA era. This era requires every individual or organization to adapt quickly and respond to changes. Continuous changes in the VUCA era pose various challenges for leaders. Caused by various factors, rapid change affects business growth through innovation in various industries (Ramadhan, et al., 2023). Currently, it is very important to maximize the utilization of technology in order to have the ability to control and master the situation well. This is because technological advancements are the reason why the world is undergoing significant changes.

PT. PLN (Perusahaan Listrik Negara) is a state-owned enterprise that manages all aspects of electricity in Indonesia. PT PLN (Persero) can be said to be one of the state-owned enterprises that make a significant contribution to national development. PLN not only provides electricity for the public, but also makes a significant contribution to state revenue. This can be seen in Figure 1.



#### Source: www.beritasatu.com

#### Figure 1. Highest State-Owned Enterprises' Revenue

To fulfill its duties and improve its services, in October 2016, PT PLN, in collaboration with its sub-holding, PT Indonesia Comnet Plus (PLN Icon Plus), released the PLN Mobile application to assist customers in managing their electricity by simplifying and improving the services provided to consumers. PLN Mobile is supported by the latest technology such as cloud computing and big data. According to Guntara (2022), Cloud Computing technology is a new perspective on the process of computing services. PLN Mobile is an application specifically designed to make it easier for customers to enjoy various services of PT PLN (Persero), such as self-metering, purchasing electricity tokens, paying electricity bills, submitting power increase requests and new electricity installations, as well as reporting disturbances that can be monitored in real-time regarding the disturbance and how it is handled until completion (Adina & Nasution, 2021).

Although PT PLN has shown its commitment to improving service quality, several shortcomings have been found, especially in some features and services available on PLN

Mobile. This is supported by negative reviews from users on the App Store and Playstore. Users complained about difficulties in using features, login problems, transaction failures, slow application response and live chat, and various other disruptions. User reviews of the PLN Mobile application on the App Store and Playstore can be seen in Table 1.

NO	Date	Name	Reviews
1.	July,15	K*****	"I can't log in, even though the Wi-Fi signal is full"
	2024		
2.	July,13	R*******	The app is taking forever to self-check.
	2024		
3.	July,4	K****	"The electricity token payment made through a
	2024		virtual account using BTN Bank has been deducted,
			but the token number has not appeared
4.	July,1	B** ****	I'm having trouble with this application. The
	2024		transactions are often delayed
5.	June,27	L*******	"Government apps, no wonder. You guys work
	2024	***	slowly and lazily
6.	July,1	****	The 'Iconnect WiFi payment' feature in the app
	2024	R****	often has errors, there's no 'Pay' button, and the
			billing details aren't sent via email, so how am I
			supposed to pay for the WiFi? When I called and
			contacted them via WhatsApp, the responses were
			very unclear and unhelpful. They kept redirecting
			me to different people without actually solving the
			problem. It's so frustrating!
7.	June.26	M******	It's terrible. The app is very slow when checking
	2024	C*****	the application details, the installation is really
		-	sloppy and nothing is done properly. I've already
			paid through PLN Mobile but it's still showing as
			unpaid. I even had to call the 123 call center to
			complain, and the work was done arbitrarily, and
			the process took months. It's unreasonable
8.	lune.24	N*** F****	"Please improve the self-service application
0.	2024		again The sending process is taking too long both
	2021		when using Wi-Fi and cellular networks. We have a
			target to complete the self-service and if this
			continues the target will not be met and we will be
			the ones who suffer the consequences. Thank you
			for your cooperation
9	May 21	****	There are some aspects of the system that need
э.	2024	ь. Р*****	to be revised. This system cannot be applied to all
	2024	F	regions in Indonesia but is being forced to be used
			in all areas, especially in Central Kalimantan where
			the reach of the area is very wide, and many remete
			che reach of the area is very wide, and many remote
			areas nave less trian lucal road access. Hoperully,
			there will be a platform provided to give feedback
			and reviews for better customer service

# Table 1. User Reviews on App Store and Play Store



<b>10.</b> May,28 M****** There's	an updatethe intention is goodwhen
2024 A**** registering	g for a new installation, the address
matches	the GPS location tag. But there's a
problem.	The address from the GPS location tag is
inaccurate	and cannot be edited. (Not all Google
Maps sho	ow the complete location address). So,
those who	b have already registered with an incorrect
addross w	will be subject to a refund

Source : Appstore and Playstore

Given the problems and phenomena faced by the PLN Mobile application, the researcher is interested in conducting further investigation. The researcher wants to deeply understand the root of the problems in the application. Therefore, the researcher is interested in researching the influence of user experience on purchasing decisions for the PLN Mobile application. In this study, the researcher uses the User Experience method proposed by Schrepp & Thomaschewski (2019). There are 6 indicators of user experience, namely Attractiveness, Perspicuity, Efficiency, Dependability, Stimulation, and Novelty. The use of this method is because this method is constantly updated and widely used in previous studies that have successfully tested the User Experience variable

# LITERATURE REVIEW

# User Experience Meaning

Fajri et al. (2021) stated that user experience is all the emotions or experiences a person has when using a product such as a website, mobile device, and software application that aims to provide comfort when operating the application. Meanwhile, Himawan & F (2020) stated that the meaning of user experience ,which is the user experience generated by software or a website to make the interaction carried out satisfying and interesting. Based on the two opinions above, it can be concluded that user experience is the overall user experience when using a product. Good UX prioritizes comfort, ease of use, positive interactions, and products that meet user needs

Benefit of User Experience

The benefits of user experience, according to Himawan & F (2020), are as follows:

- a. Facilitates users: Implementing user experience will make applications easier to use because there is an evaluation of usability aspects.
- b. Attracts users: Implementing user experience is used to attract users because an unattractive user experience will be easily abandoned.
- c. Forms a good UI: If user experience is viewed correctly, then a good UI will be produced.
- d. Wins competition: Even though there are competitors in the same field, the implementation of good and appropriate user experience will win the market.
- e. Impacts success: Implementing user experience is important to improve or strengthen success."

## Characteristics of User Experience

According to Hartson & Pyla (2019), user experience has several characteristics, as follows:

- a. It is the result of both direct and indirect interactions.
- b. User experience is about the totality of effects.
- c. It is experienced internally by the user.
- d. It takes into account the context of application and environment User Experience Metrics

User Experience has 6 indicators according to Schrepp & Thomaschewski, (2019), as follows

- a. Attractiveness is the impression users have of the overall product, whether they like it or not.
- b. Perspicuity is the ease of understanding how to use the product and becoming familiar with it.
- c. Efficiency is the ability of users to complete tasks quickly and efficiently without much effort.
- d. Dependability is the level of user control in the interaction.
- e. Stimulation is the level of user motivation and enjoyment.
- f. Novelty is the level of innovation and creativity that can attract user attention. Meaning of Purchase Decision

According to Fandy Tjiptono (in Duan, et al., 2019), a purchase decision is a method used to help consumers recognize their problems, and to seek explanations about a particular product or brand, and to evaluate how well the available alternatives solve the problem, which ultimately leads to a purchase decision. In addition to Fandy Tjiptono's opinion,

there is also the definition of Purchase Decision according to Morissan (in Pratiwi & Pathrika, 2021), according to him, a purchase decision is a consumer behavior in searching for information by comparing brands and evaluating products.

Not only the two opinions above, but there is also an opinion expressed by Schiffman and Kanuk (in Susanti and Gunawan, 2019) who argue that a purchase decision is a step chosen by someone in selecting one of several available alternatives.

Based on the three opinions above regarding purchasing decisions, it can be interpreted that a purchasing decision is a method or step used to determine a choice regarding a product/service from available alternatives.

Factors Influencing Purchasing Decisions

Every individual certainly has reasons for making a purchase decision. A person is unlikely to buy something without a reason behind it. The factors that cause a consumer to reach the stage of a purchase decision, according to Kotler and Keller (in Putra & Saputri, 2020), are as follows:

a) Cultural Factors Culture, subculture, and social class play an important role in purchasing behavior. Culture is a fundamental factor in determining people's desires and behavior. Culture is also a very basic factor in shaping desires and behavior in making purchasing decisions.

b) Social Factors In addition to cultural factors, another factor that influences purchasing decisions is social factors. Social factors include reference groups, social roles, family, and social status.

c) Personal Factors Consumer decisions in making purchases are also influenced by personal factors. For companies or marketers, this factor needs to be considered carefully so that the products offered can reach consumers and be well received. The following are personal factors that need to be considered regarding consumer psychology.

Motivation Human behavior is initiated by the motivation to achieve a goal. This shows that motivation can generate spending incentives because motivation is rooted in needs and goals.

Perception Perception is the human process of selecting, organizing, and interpreting information to create a meaningful picture of the world. In marketing, perception trumps reality because perception actually influences consumer behavior.

Learning Learning is an activity that humans do throughout their lives. In this learning process, marketers identify the learning process and look for the right tips to provide incentives, information, and experiences so that consumers can learn more about the products offered.

Purchase Decision Indicators

To fulfill their needs, consumers take actions known as purchase decision indicators. Purchase decision indicators, according to Kotler and Keller (in Ekawati, et al., 2018) are as follows:

a) The need for a product



- b) Consistency in service quality
- c) The decision to recommend to others

## METHOD

This research is a quantitative study with a survey research design. Data was collected through observation and questionnaires. Simple linear regression analysis was used to achieve the research objectives with a total sample of 97 respondents and using purposive sampling.

# **RESULT AND DISCUSSION**

## Validity Test

In this study, the validity test was conducted on 21 questions posed to 30 PLN Mobile users. Of the 21 questions, 14 questions were designed to measure various aspects of user experience. Meanwhile, the other 7 questions were focused on factors that influence users' decisions in making purchases through PLN Mobile. The criteria for validity testing are as follows: a) A question item is considered valid if the calculated r-value is greater than the table r-value. b) A question item is considered invalid if the calculated r-value is less than the table r-value."

statement         Count R         Table R (N-2) N=30         Sig.         Description           X.1         0.696         0.3061         0.000         Valid           X.2         0.845         0.3061         0.000         Valid           X.3         0.681         0.3061         0.000         Valid           X.4         0.656         0.3061         0.000         Valid           X.4         0.656         0.3061         0.000         Valid           X.5         0.794         0.3061         0.000         Valid           X.6         0.756         0.3061         0.000         Valid           X.7         0.883         0.3061         0.000         Valid           X.8         0.875         0.3061         0.000         Valid           X.9         0.875         0.3061         0.000         Valid           X.10         0.864         0.3061         0.000         Valid           X.11         0.880         0.3061         0.000         Valid           X.12         0.880         0.3061         0.000         Valid           X.13         0.886         0.3061         0.000         Valid <td< th=""><th>Table 2</th><th>. Results of Us</th><th>ser Experienc</th><th>e Variable V</th><th>alidity Test</th></td<>	Table 2	. Results of Us	ser Experienc	e Variable V	alidity Test
statement         Count R         (N-2) N=30         Sig.         Description           X.1         0.696         0.3061         0.000         Valid           X.2         0.845         0.3061         0.000         Valid           X.3         0.681         0.3061         0.000         Valid           X.4         0.656         0.3061         0.000         Valid           X.5         0.794         0.3061         0.000         Valid           X.6         0.756         0.3061         0.000         Valid           X.7         0.883         0.3061         0.000         Valid           X.8         0.875         0.3061         0.000         Valid           X.9         0.875         0.3061         0.000         Valid           X.10         0.864         0.3061         0.000         Valid           X.11         0.851         0.3061         0.000         Valid           X.12         0.880         0.3061         0.000         Valid           X.13         0.886         0.3061         0.000         Valid           X.14         0.782         0.3061         0.000         Valid			Table R		
N=30           X.1         0.696         0.3061         0.000         Valid           X.2         0.845         0.3061         0.000         Valid           X.3         0.681         0.3061         0.000         Valid           X.4         0.656         0.3061         0.000         Valid           X.5         0.794         0.3061         0.000         Valid           X.6         0.756         0.3061         0.000         Valid           X.7         0.883         0.3061         0.000         Valid           X.8         0.875         0.3061         0.000         Valid           X.9         0.875         0.3061         0.000         Valid           X.10         0.864         0.3061         0.000         Valid           X.11         0.851         0.3061         0.000         Valid           X.12         0.880         0.3061         0.000         Valid           X.13         0.886         0.3061         0.000         Valid           X.14         0.782         0.3061         0.000         Valid	statement	Count R	(N-2)	Sig.	Description
X.10.6960.30610.000ValidX.20.8450.30610.000ValidX.30.6810.30610.000ValidX.40.6560.30610.000ValidX.50.7940.30610.000ValidX.60.7560.30610.000ValidX.70.8830.30610.000ValidX.80.8750.30610.000ValidX.90.8750.30610.000ValidX.100.8640.30610.000ValidX.120.8800.30610.000ValidX.130.8860.30610.000ValidX.140.7820.30610.000Valid			N=30		
X.2       0.845       0.3061       0.000       Valid         X.3       0.681       0.3061       0.000       Valid         X.4       0.656       0.3061       0.000       Valid         X.5       0.794       0.3061       0.000       Valid         X.6       0.756       0.3061       0.000       Valid         X.7       0.883       0.3061       0.000       Valid         X.8       0.875       0.3061       0.000       Valid         X.9       0.875       0.3061       0.000       Valid         X.10       0.864       0.3061       0.000       Valid         X.11       0.851       0.3061       0.000       Valid         X.12       0.880       0.3061       0.000       Valid         X.13       0.886       0.3061       0.000       Valid         X.14       0.782       0.3061       0.000       Valid	X.1	0.696	0.3061	0.000	Valid
X.3       0.681       0.3061       0.000       Valid         X.4       0.656       0.3061       0.000       Valid         X.5       0.794       0.3061       0.000       Valid         X.6       0.756       0.3061       0.000       Valid         X.7       0.883       0.3061       0.000       Valid         X.8       0.875       0.3061       0.000       Valid         X.9       0.875       0.3061       0.000       Valid         X.10       0.864       0.3061       0.000       Valid         X.11       0.851       0.3061       0.000       Valid         X.12       0.880       0.3061       0.000       Valid         X.13       0.886       0.3061       0.000       Valid         X.14       0.782       0.3061       0.000       Valid	X.2	0.845	0.3061	0.000	Valid
X.40.6560.30610.000ValidX.50.7940.30610.000ValidX.60.7560.30610.000ValidX.70.8830.30610.000ValidX.80.8750.30610.000ValidX.90.8750.30610.000ValidX.100.8640.30610.000ValidX.110.8510.30610.000ValidX.120.8800.30610.000ValidX.130.8860.30610.000ValidX.140.7820.30610.000Valid	X.3	0.681	0.3061	0.000	Valid
X.50.7940.30610.000ValidX.60.7560.30610.000ValidX.70.8830.30610.000ValidX.80.8750.30610.000ValidX.90.8750.30610.000ValidX.100.8640.30610.000ValidX.110.8510.30610.000ValidX.120.8800.30610.000ValidX.130.8860.30610.000ValidX.140.7820.30610.000Valid	X.4	0.656	0.3061	0.000	Valid
X.6       0.756       0.3061       0.000       Valid         X.7       0.883       0.3061       0.000       Valid         X.8       0.875       0.3061       0.000       Valid         X.9       0.875       0.3061       0.000       Valid         X.10       0.864       0.3061       0.000       Valid         X.11       0.851       0.3061       0.000       Valid         X.12       0.880       0.3061       0.000       Valid         X.13       0.886       0.3061       0.000       Valid         X.14       0.782       0.3061       0.000       Valid	X.5	0.794	0.3061	0.000	Valid
X.7       0.883       0.3061       0.000       Valid         X.8       0.875       0.3061       0.000       Valid         X.9       0.875       0.3061       0.000       Valid         X.10       0.864       0.3061       0.000       Valid         X.11       0.851       0.3061       0.000       Valid         X.12       0.880       0.3061       0.000       Valid         X.13       0.886       0.3061       0.000       Valid         X.14       0.782       0.3061       0.000       Valid	X.6	0.756	0.3061	0.000	Valid
X.8       0.875       0.3061       0.000       Valid         X.9       0.875       0.3061       0.000       Valid         X.10       0.864       0.3061       0.000       Valid         X.11       0.851       0.3061       0.000       Valid         X.12       0.880       0.3061       0.000       Valid         X.13       0.886       0.3061       0.000       Valid         X.14       0.782       0.3061       0.000       Valid	X.7	0.883	0.3061	0.000	Valid
X.9       0.875       0.3061       0.000       Valid         X.10       0.864       0.3061       0.000       Valid         X.11       0.851       0.3061       0.000       Valid         X.12       0.880       0.3061       0.000       Valid         X.13       0.886       0.3061       0.000       Valid         X.14       0.782       0.3061       0.000       Valid         Total X       1       0.3061       0.000       Valid	X.8	0.875	0.3061	0.000	Valid
X.10       0.864       0.3061       0.000       Valid         X.11       0.851       0.3061       0.000       Valid         X.12       0.880       0.3061       0.000       Valid         X.13       0.886       0.3061       0.000       Valid         X.14       0.782       0.3061       0.000       Valid         Total X       1       0.3061       0.000       Valid	X.9	0.875	0.3061	0.000	Valid
X.11         0.851         0.3061         0.000         Valid           X.12         0.880         0.3061         0.000         Valid           X.13         0.886         0.3061         0.000         Valid           X.14         0.782         0.3061         0.000         Valid           Total X         1         0.3061         0.000         Valid	X.10	0.864	0.3061	0.000	Valid
X.12         0.880         0.3061         0.000         Valid           X.13         0.886         0.3061         0.000         Valid           X.14         0.782         0.3061         0.000         Valid           Total X         1         0.3061         0.000         Valid	X.11	0.851	0.3061	0.000	Valid
X.13         0.886         0.3061         0.000         Valid           X.14         0.782         0.3061         0.000         Valid           Total X         1         0.3061         0.000         Valid	X.12	0.880	0.3061	0.000	Valid
X.14         0.782         0.3061         0.000         Valid           Total X         1         0.3061         0.000         Valid	X.13	0.886	0.3061	0.000	Valid
Total X         1         0.3061         0.000         Valid	X.14	0.782	0.3061	0.000	Valid
	Total X	1	0.3061	0.000	Valid

# Source : SPSS 25

Based on the analysis results in Table 2, all 14 statement components designed to measure user experience were declared valid. This conclusion was obtained by comparing the correlation coefficient values (calculated R) of each component with the critical value (table

R). In which, the calculated R value of each component is greater than the determined table R value.

The critical value of table R is 0.3061, obtained through calculation using the formula table R = N-2, where N is the number of respondents, which is 30. Thus, the degrees of freedom (df) used is 28. Furthermore, by referring to the t-distribution table with a significance level of 5% ( $\alpha$  = 0.05) and 28 degrees of freedom, the critical value of table R of 0.3061 is obtained. **Table 3. Results of Purchase Decision Variable Validity Test** 

Pernyataan	R Hitung	R Tabel (N-2) N=30	Sig.	Keterangan
Y.1	0.868	0.3061	0.000	Valid
Y.2	0.907	0.3061	0.000	Valid
Y.3	0.754	0.3061	0.000	Valid
Y.4	0.835	0.3061	0.000	Valid
Y.5	0.840	0.3061	0.000	Valid
Y.6	0.832	0.3061	0.000	Valid
Y.7	0.805	0.3061	0.000	Valid
Y	1	0.3061	0.000	Valid

# Source: SPSS 25

Based on the analysis presented in the table, all seven statements used in this study were found to be valid. This conclusion is drawn from the comparison between the calculated correlation coefficient (R) and the critical value. The calculated R for each statement is greater than the critical value of 0.3061 at a 5% significance level, indicating a significant correlation between each statement and the measured variable. Thus, these statements can be considered valid for representing the intended concept.

#### **Reability Test**

Reliability testing is a crucial step in research to ensure that the data obtained from a measurement instrument is reliable. If a measurement instrument is not reliable, then the validity of the research results is also questionable. Therefore, before using a measurement instrument in research, a reliability test must be conducted first. The criterion for reliability testing is that the Cronbach's Alpha value is considered acceptable if it is greater than 0.6. If the value obtained from Cronbach's alpha is closer to 1, then the higher the internal consistency reliability.

Tabel 4. Reliability Test Results of Purchase Decision Variable						
Variabel Cronbac N of Keterangan						
User Experience	.959	14		Reliabel		

Based on Table 4 the obtained Cronbach's alpha value of 0.959 indicates a very high level of reliability for the 14 statements measuring the user experience variable. This value is well above the generally accepted minimum threshold of 0.6, indicating that all statements are consistent in measuring the user experience construct. Thus, it can be concluded that the research instrument used in this study is highly reliable.

Tabel 5. Reliability Test Results of Purchase Decision Variable						
Variabel	Cronbac h's Alpha	N Items	of	Description		



Journal of Investment, Development, Economics and Accounting

# ISSN (*print*) : 3047-3470 & ISSN (online) : 3047-1982

Purchase Decision .919 7 Reliabel

Based on the reliability test results for the 7 statements regarding purchasing decisions presented in Table 5, the Cronbach's alpha value obtained for the seven statements measuring the purchase decision variable is 0.919. This value indicates a very high level of reliability. It implies that all of these statements are closely related and consistent in measuring the construct of purchasing decisions. Therefore, it can be concluded that the research instrument used to measure the purchasing decision variable is highly reliable and dependable.

## **Descriptive Analysis**

This research adopts a quantitative descriptive approach to analyze the data. The analysis was conducted by describing the characteristics of respondents through 14 statements that measure the level of user satisfaction with the PLN Mobile application, as well as 7 statements that measure the tendency of users to make purchases through the application. This study uses a 1-5 Likert scale, where 1 represents "strongly disagree" and 5 represents "strongly agree".

l able 6 Descri	Table 6 Descriptive Analysis Scale Range				
Rentang Skala	Keterangan				
1.00 - 1.80	Very Bad				
1.81 - 2.60	Bad				
3.61 - 3.40	Neutral				
3.41 – 4.20	Good				
4.21 - 5.00	Very Good				
	(Source : Dorcriptive Analysis	1			

(Source : Dercriptive Analysis)

The following is a descriptive analysis of the quantitative data obtained from the questionnaire regarding user experience and purchase decision variables.

Tabel 7 Descriptive Analysis Results							
Dimensions	Minimum	Maximum	Mean	Std. Deviation	Description		
Attractiveness	1.00	5.00	3.98	0.69	Good		
Erspicuity	2.67	5.00	4.20	0.60	Good		
Efficiency	3.00	5.00	4.20	0.65	Good		
Dependability	3.00	5.00	4.07	0.70	Good		
Stimulation	2.00	5.00	3.97	0.79	Good		
у	3.00	5.00	4.09	0.65	Good		
Need	2.50	5.00	4.19	0.66	Good		
Quality of Service	2.50	5.00	4.28	0.71	Very Good		
Giving_suggestion	2.00	5.00	4.05	0.73	Good		
Valid N (listwise)							

Source : SPSS 25

#### Explanation

a. Minimum: The lowest value obtained from the dataset.

**b. Maximum**: The highest value obtained from the dataset.

**c. Mean**: The average value obtained by dividing the sum of all values by the number of samples.

**d. Standard Deviation:** A statistic used to measure the amount of variation or dispersion of a set of values. A high standard deviation indicates that the values are spread out over a

wide<sup>1</sup> range. A low standard deviation indicates that the values tend to be clustered around the mean.

e. Description: An explanation of the category based on the obtained mean value.

#### **Classical Assumption Test**

Normality Test

Normality test is one of the classical assumptions in regression analysis. This assumption tests whether the residuals or errors from a regression model are normally distributed. Normal distribution is an important assumption because many parametric statistical tests assume that the data is normally distributed. One of the commonly used tests for normality is the Kolmogorov-Smirnov test. In this study, the Kolmogorov-Smirnov test was used to test the normality of residuals. The testing criteria used is that if the significance value (sig.) is greater than 0.05, then the residuals can be considered normally distributed. Conversely, if the sig. value is less than or equal to 0.05, then the residuals are not normally distributed. The results of the normality test are presented in Table 4.7. In this table, the exact sig. value is used because it is considered more appropriate for testing data with a large sample size.

Table 7. Normality Test Result						
		Unstandardized Residual				
Ν		97				
Normal	Mean	.0000000				
Parameters <sup>a,b</sup>	Std.	.64143341				
	Deviation					
Most	Absolute	.116				
Extreme	Positive	.061				
Differences	Negative	116				
Test Statistic	-	.116				
Asymp. Sig. (2-tailed)		.003°				
Exact Sig. (2-ta	ailed)	.134				
Point Probabili	ty	.000				

Source : SPSS 25

Based on the Kolmogorov-Smirnov test results presented in Table 7, the significance value obtained is 0.134. Since this significance value is greater than 0.05, it can be concluded that the residuals from the regression model are normally distributed. This means that the normality assumption is met. This indicates that the use of parametric statistical tests in this data analysis is appropriate.

The normality test results, which show that the residuals are normally distributed, have important implications for data analysis. With the normality assumption met, the results of the regression analysis can be considered more reliable and valid. Additionally, researchers can use various parametric statistical tests that assume normally distributed data, such as t-tests, F-tests, and analysis of variance (ANOVA). Therefore, the results of this study can be trusted and can be used to draw stronger conclusions

Linearity Test

Linearity test is one of the important assumptions in regression analysis. This test aims to determine whether the relationship between the independent variable (X) and the dependent variable (Y) is linear. This linearity assumption is important because many regression analysis techniques assume a linear relationship between these variables. If the relationship between the variables is not linear, then the resulting regression model may be inaccurate and cannot be generalized.

In this study, a linearity test was conducted to determine whether the relationship between variables X and Y is linear. The testing criteria used is based on the probability value (p-value). If the probability value is greater than 0.05, it can be concluded that the relationship between



variables X and Y is linear. Conversely, if the probability value is less than or equal to 0.05, then the relationship between variables X and Y is considered non-linear.

The results of the linearity test are presented in Table 4.8. Based on the table, the probability value is 0.69. Since this probability value is much greater than 0.05, it can be concluded that the relationship between variables X and Y is linear. This means that an increase of one unit in variable X will be accompanied by a consistent increase or decrease in variable Y..

			Sum of Squares	df	Mean Square	F	Sig.
Trans _Y * User Experi ence	Betwe en	(Comb ined)	115.694	25	4.628	12.789	.000
	Group s	Lineari ty	101.889	1	101.889	281.567	.000
		Deviat ion from Lineari ty	13.806	24	.575	1.590	.069
	Within G	iroups	25.692	71	.362		
	Total		141.387	96			

#### **Tabel 8. Linearity Test Result**

#### Source: SPSS 25

The results of the linearity test, indicating a linear relationship between variables X and Y, have significant implications for regression analysis. With the fulfillment of the linearity assumption, the resulting regression model can be considered more accurate and can be used to predict the value of variable Y based on the value of variable X.

Heteroscedasticity Test

Heteroscedasticity test is one of the classical assumptions in regression analysis. This assumption tests whether the variance of the residuals (the difference between the actual value and the predicted value) is the same for all values of the independent variable. If the variance of the residuals is not constant, then heteroscedasticity occurs. In this study, the Glejser test was used to test for heteroscedasticity between the user experience variable and the purchase decision variable.

The Glejser test is conducted by regressing the absolute value of the residuals against the independent variable. If the regression coefficient is statistically significant (t-value is greater than the critical value at a significance level of 0.05), it can be concluded that heteroscedasticity exists. Conversely, if the regression coefficient is not significant, then there is no heteroscedasticity. In other words, if the significance of the Glejser test (t) is greater than the significance level (0.05), then the variance of the residuals is the same or there is no heteroscedasticity. The results of the Glejser test are presented in Table 4.9. Based on the table, the significance value is 0.529. This value is much greater than the significance level of 0.05. This indicates that the regression coefficient is not statistically significant. Thus, it can

be concluded that there is no heteroscedasticity in the regression model between the user experience variable and the purchase decision variable.

	Tabel 9. Heteroscedasticity Test Result								
M	Model		Unstandardiz Standa ed Coefficients zed Coefficien		t	Sig.			
		В	Std. Error	Beta	-				
1	(Constant)				1				
	. ,		.301		.04	.301			
		313			0				
	User								
	Experience	003	.005	.065	63	.529			
					2				
а.	Dependent Variab	le: ABS	RES						

#### (Sumber : IBM SPSS 25)

The results of the heteroscedasticity test, which indicate the absence of heteroscedasticity, have positive implications for regression analysis. This means that the variance of the residuals is constant for all values of the user experience variable. Thus, the assumption of homoscedasticity is met. Satisfaction with the results of the regression analysis is also increased because the resulting regression model can be considered more reliable and can be used to make broader generalizations.

# Simple Linear Regression Analysis

A simple linear regression analysis was conducted to examine the influence of user experience (X) on purchasing decisions (Y). The objective was to determine whether there is a linear relationship between the two variables and the extent to which user experience influences purchasing decisions. The results of this regression test will provide a clearer picture of the contribution of user experience in influencing consumers' decisions to purchase products or services.

The testing criteria used is by comparing the significance value (sig.) with the predetermined significance level of 0.05. If sig. is greater than 0.05, then  $H_0$  is accepted, meaning there is no significant influence. Conversely, if sig. is less than 0.05, then  $H_1$  is accepted, meaning there is a significant influence.

Сс	l abel 10. pefficients <sup>a</sup>	Simple Lin	ear Regre	ession Analysis	Result	
Мо	odel	Unsta	Indardize	Standardiz	t	Si
		d Coefficients		ed		g.
				Coefficients		U
		В	Std.	Beta		
			Error			
1	(Constant)	9.6	.487		19.7	.0
		15			42	00
	User		.008	849	-	.0
	Experience	.132			15.654	00
a.	Dependent Varia	ble: Trans_	Y			
				(Source	e: IBM SP	SS 25)

Based on the results of simple linear regression analysis, it can be concluded that user experience has a significant influence on purchasing decisions. The better the user experience provided, the higher the likelihood of consumers making a purchase. The results of this study support the proposed hypothesis, namely that there is a positive relationship between user



experience and purchasing decisions. This finding has important implications for companies, which is the need to pay greater attention to efforts to improve user experience in order to increase sales..

#### **Coefficient of Determination Test**

The coefficient of determination (R-squared) is a crucial statistic in regression analysis. This statistic indicates the proportion of the variance in the dependent variable (in this case, purchasing decisions) that can be explained by the variance in the independent variable (in this case, user experience). In other words, R-squared measures how well our regression model predicts the values of the dependent variable based on the values of the independent variable.

The results of the coefficient of determination (R-squared) test are presented in Table 4.11. The obtained R-squared value is 0.721. This means that 72.1% of the total variation in purchasing decisions can be explained by the variation in user experience. The remaining 27.9% is influenced by other factors that are not included in this regression model.

	Table	e 11. Coef	ficient of Dete	ermination Test Result				
Mode	el Summa	ary <sup>ь</sup>						
Mod el 1	R .849ª	R Square .721	Adjusted Square .718	R Std. Error of Durbin- the Estimate Watson .64480 1.659				
a. Predictors: (Constant), User Experience								
b. De	pendent	Variable: T	rans_Y					
				Source :IBM SPSS :				

The R-squared value of 0.721 indicates that user experience has a significant influence on the purchasing decisions of PLN Mobile application users. In other words, an improvement in user experience will have a significant impact on increasing the likelihood of users making purchases through the application.

These results indicate that efforts to improve user experience are a very strategic step for PLN Mobile to increase revenue from its digital services. Based on the results of the coefficient of determination analysis, it can be concluded that user experience is a very important factor in influencing the purchasing decisions of PLN Mobile application users. The regression model developed in this study is able to explain 72.1% of the total variation in purchasing decisions. This result provides strong empirical evidence of the importance of providing a good user experience in improving digital business performance.

## CONCLUSION

Based on the research results, it can be concluded that there is a significant influence of user experience on the purchasing decisions of PLN Mobile users. This is evidenced by simple linear regression testing which shows a positive linear relationship between the two variables. The coefficient of determination (R-squared) value of 0.721 indicates that approximately 72.1% of the variance in user purchasing decisions can be explained by user experience.

In other words, a good user experience on the PLN Mobile application plays an important role in encouraging users to make purchases. User-friendly features, attractive appearance, and overall ease of use of the application contribute significantly to purchasing decisions

#### Suggestion

Based on the findings of this research, the following recommendations are proposed:

Continuous Improvement of User Experience: PLN Mobile should continuously evaluate and develop the app's user experience. This can be done through regular user surveys, analysis of app usage data, and by paying attention to the latest trends in UI/UX design.

Focus on Core Features: PLN Mobile should focus more on developing features that are most frequently used and provide the greatest benefits to users. This way, available resources can be allocated effectively and efficiently.

Personalize User Experience: PLN Mobile can implement personalization features to provide a more relevant experience for each user. For example, by recommending products or services that match the user's profile.

Improve Customer Service Quality: In addition to the app's user experience, the quality of customer service also needs to be considered. Quick responses to user questions or complaints will increase customer satisfaction and drive loyalty.

More Intensive Socialization: PLN Mobile needs to conduct more intensive socialization regarding new features and benefits offered by the application. This can be done through various channels, such as social media, email, or advertising campaigns.

By implementing these recommendations, it is expected that PLN Mobile can continue to improve the quality of its services and maintain or even increase its number of users.

#### **REFERENCES.**

- Adina, C. P., & Nasution, N. (2021). Proses Rebranding Aplikasi New PLN Mobile oleh Humas PT. PLN Persero (Doctoral dissertation).
- Duan, R. R., Kalangi, J. A., & Walangitan, O. F. (2019). Pengaruh strategi promosi terhadap keputusan pembelian motor yamaha mio pada PT. hasjrat abadi tobelo. *Jurnal Administrasi Bisnis (JAB)*, *9*(1), 128-136.
- Ekawati, P., Hidayati, N., & Saraswati, E. (2022). Pengaruh User Experience, Discount dan Kemudahan Akses terhadap Keputusan Pembelian pada Pengguna Grabfood (Studi pada Mahasiswa Manajemen UNISMA Angkatan 2018). *E-JRM: Elektronik Jurnal Riset Manajemen*, *11*(06).
- Fajri, Nur, Hayyuni Maulidya, Herman Tolle, and Retno Indah Rokhmawati. 2021. "Perancangan Pengalaman Pengguna Aplikasi Survei Online Berbayar Antar Mahasiswa Berbasis Mobile
- Guntara, R. G. (2022). Firebase Realtime Database Untuk Aplikasi Point of Sales UMKM Berbasis Cloud Computing Pada Smartphone Android. *Impression: Jurnal Teknologi dan Informasi*, 1(2), 1-10.
- Himawan, H., & Yanu F, M. (2020). Interface User Experience.
- Pratiwi, M. I., & Patrikha, F. D. (2021). Pengaruh gaya hidup, harga dan influencer terhadap keputusan pembelian di rumah makan se'I sapiku Surabaya. *Jurnal Pendidikan Tata Niaga (JPTN)*, *9*(3), 1417-1427.
- Ramadhan, H. A., Purwaamijaya, B. M., & Guntara, R. G. (2023). Pengaruh User Experience terhadap Customer Satisfaction pada Aplikasi Seluler Streaming Vidio. *JTIM: Jurnal Teknologi Informasi dan Multimedia*, 5(2), 122-133.
- Schrepp, M., & Thomaschewski, J. (2019). Eine modulare Erweiterung des User Experience Questionnaire.
- Susanti, F., & Gunawan, A. C. (2019). Pengaruh bauran promosi dan harga terhadap keputusan pembelian produk kosmetik Maybelline di kota Padang.
- Syarif, N. (2021). Pengaruh User Experience Terhadap Customer Satisfaction Dan Customer Loyalty Generasi Milenial Pada Aplikasi Streaming Spotify.