

User Satisfaction Analysis Of Pln Mobile Application At Jabodetabek

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Abstract

The ease of use and usefulness of an application are pivotal factors in determining user satisfaction. The objective of this study is to analyse the level of user satisfaction with the PLN Mobile application in the Jabodetabek area. The data were collected via an online questionnaire distributed through various platforms, including WhatsApp, Instagram, and Facebook. The study population consisted of individuals who had utilized the PLN Mobile application for a minimum of three months and were at least 17 years of age. A sample of 116 respondents was obtained using Slovin's formula. The data was analysed using the statistical software package SPSS (Statistical Package for the Social Sciences) version 27, which enabled the researcher to perform a range of descriptive, validity, reliability, mean, standard deviation and T-tests. The results of the study, based on the mean tests, indicated that users were satisfied with the PLN Mobile application in terms of ease of use and satisfaction, information management system, and usefulness, all of which significantly contributed to overall user satisfaction. Based on these findings, the marketing implications of this study suggest that application developers should enhance user satisfaction by improving reliability features and customer service to provide better user experiences.

Keyword : user satisfaction, quantitative, jabodetabek, PLN Mobile

1. Introduction

Globalisation has had a profound impact on the lives of people worldwide, particularly in terms of the development of technology that is crucial for their well-being. This development is influenced by the digital revolution, which has given rise to a plethora of social innovations that can meet the needs of society. The advent of digital technology has precipitated a new era of globalisation, characterised by the emergence of novel social interactions. The advent of technology has become a pivotal factor in enhancing the quality of life for individuals, thereby giving rise to the development of novel technologies. In order to adapt and innovate in the context of this technological advancement, companies must adapt and innovate in order to develop their businesses, provide superior services in a timely and efficient manner, and facilitate ease of use for consumers. One example of such an innovative solution is the PLN Mobile application, developed by the PT PLN (Persero). The PLN Mobile application provides users with access to a range of services, including police information, ticket booking, new ticket booking, a marketplace, and other relevant information. The PLN Mobile application has reached 10 million users of Android smartphones across Indonesia, with a 4.8 rating on the Play Store. However, a considerable number of reviews have been negative. Currently, user satisfaction is a crucial factor in the success of technology developed by PLN.

PLN/province units	Number of Users in Category Household Customers
UID Jawa Barat	15.053.623
UID Banten	3.501.321
UID Jakarta Raya	4.670.638
TOTAL	47.009.082

Source: Data Statistik PLN (2023)

The data published on the official PLN website indicate that the total number of electricity consumers in the residential category on the island of Java by the end of 2022 was 47,009,082. This indicates that a significant proportion of PLN customers have not yet adopted the PLN Mobile application.

A review of the literature reveals that 22.77% of users are dissatisfied with PLN Mobile due to a number of factors, including the inability to store personal biodata, the lack of access to a comprehensive list of services, and the absence of a clear registration process. Furthermore, PLN Mobile has encountered challenges with token transactions, which could prompt the government to assess the app's functionality and develop enhanced services. The objective of this study is to provide users with an understanding of the limitations associated with the utilisation of PLN Mobile applications. To this end, a quantitative study will be conducted, based on data and research findings, with the aim of gauging user satisfaction with the quality of service provided by PLN Mobile applications. The research will facilitate an in-depth analysis of the features of PLN Mobile applications, and will also provide insights into user satisfaction, with a view to improving the quality of the service.

2. Literature Review

User Satisfaction

User satisfaction is the degree to which users are content and find value in an application is known as user satisfaction, and it is frequently impacted by the app's usability, functionality, and overall experience. In their 2020 study, Sarah and Putu define user satisfaction as an individual's emotional state, encompassing both positive (e.g., satisfaction) and negative (e.g., disappointment) feelings, resulting from a comparison between the perceived performance of a product and one's expectations. Customer satisfaction serves as a key indicator of the success of an information system implementation. It provides insights into the strengths and weaknesses of the system, enabling its optimization to align with user needs (Fadhila et al., 2022). Shella dan Eso (2022) that customer satisfaction plays a significant role in maintaining competitiveness and market position. They argue that customer satisfaction affects customer loyalty and, in turn, repeat purchases.

3. Material and Method

3.1 Design Study

The study was conducted online via a questionnaire distributed via Google Forms to users of PLN Mobile in the Jabodetabek region. The research was conducted between January 2024 and the conclusion of the study, during which time the online questionnaire was distributed. In addition, distributing questionnaires online is more effective because it is easy, efficient and cost-effective.

Population

The population under investigation in this study is comprised of users of the PLN Mobile application in the Jabodetabek region. The Jabodetabek region was selected for investigation by the researchers due to its alignment with previous research references and statistical data indicating the highest concentration of electricity users in West Java and Jakarta. The data obtained from the BPS PT PLN (Persero) in the Jabodetabek region indicate that the highest number of electricity consumers in this area are located in Jakarta. This is attributed to the high concentration of population in the city. In comparison with the surrounding areas of Bogor, Depok, Tangerang and Bekasi, the business, office and industrial activities in Jabodetabek are more intense. The total number of PLN electricity consumers in Jabodetabek is 9,106,272 electricity consumers are located in the Jabodetabek area.

Population

The sampling method employed in this study was non-probability sampling. A non-probability sampling method is a technique used to select a sample from a population, whereby the members of the population do not have an equal probability of being selected as the sample (Yuni et al., 2020). Accordingly, the researcher has established specific criteria that must be met by the sample used in this study.

The criteria for the sample to be tested in this study are as follows:

- a. The respondents must reside in the Jabodetabek area.
- b. The respondents must be at least 17 years of age.
- c. The respondents must have used or currently use the PLN Mobile application for a minimum of three months.

In measuring the sample size to be studied, the researcher used the Slovin formula with a 10% margin of error. The resulting calculation is as follows:

$$n = \frac{N}{1 + (Ne^2)}$$

n = Required sample size (number of respondents)

N = Population size (9,106,272, representing the cumulative number of electricity consumers in Jabodetabek)

e : Sample error (10%)

$$n = \frac{9.106.272}{1 + (9.106.272)(0,1)^2}$$

$$n = \frac{9.106.272}{91.063}$$

$$n = 99,9$$

Based on the aforementioned results, the minimum sample size was determined to be 99.9, rounded up to 100 respondents.

3.2 Data Analysis

Descriptive Analysis

Descriptive analysis is a technique employed to describe the object of investigation, obtained through sampling or collected data, and to draw general conclusions (Eva & Wiyli, 2022). The descriptive analysis method is employed to analyse quantitative data, with the objective of generating a conclusion that presents a description or data set derived from the responses of the subjects under investigation (Arif & Deni, 2019). In this study, the results of the questionnaire completed by respondents are described by dividing them into five categories, each representing a different level of achievement, in order to facilitate the interpretation of the questionnaire results.

T Test

In this study, the aim was to identify significant differences in user satisfaction with the PLN Mobile application, with a significance level of $\alpha = 0.05$ (5%). The calculated T-value was greater than the critical T-value, as determined by the following formula:

$$df = (n - (k + i) - 1)$$

n = Total number of data

k = Independent variable being tested

i = Variable (user satisfaction)

Mean Test

Mean test is a statistical technique used to compare the differences between the average or middle values of a group, which researchers can then draw conclusions from. The formula that can be used to calculate the mean is as follows:

$$\frac{\sum x_i}{n} = \frac{1}{n} (X_1 + X_2 + \dots + X_n)$$

Description:

X_i = Individual value in the data description/user satisfaction score

" $\sum x_i$ " = Average number of dimension values

n = Number of Samples

X_n = Variable n

And to describe the respondents' responses to the items used in this study by looking at the mean obtained with each statement in the questionnaire, the Likert Interval Scale is used as follows:

Table 3.1 Satisfaction Level Interval Scale

Rata-rata	Keterangan
1,00 - 1,80	Very Dissatisfied
1,81 - 2,61	Dissatisfied
2,62 - 3,42	Less Satisfied
3,42 - 4,22	Satisfied
4,23 - 5,00	Very Satisfied

Source: Zahra dan Putra (2024)

Standard Deviation Test

Standard deviation is a value that indicates the degree of variation of a data group or a standard measure of deviation or a point of how far the data is spread from the average (Linda et al., 2023). This standard deviation is a statistical method used to evaluate the extent of data distribution in a sample to determine how heterogeneous or homogeneous the data is. This study uses a standard deviation test with the formula:

$$s = \sqrt{\frac{\sum (x_i - x_{ni})^2}{n - 1}}$$

Description:

s = Standard deviation

X_i = Sample value

\bar{X} = Sample mean

n = Number of observations in the sample

4. Result and Discussion

4.1 Analysis Descriptive Data

The responses from the 116 respondents to the questionnaire were analysed to obtain data regarding user satisfaction with the PLN Mobile application. The data were collected using purposive sampling and were analysed using techniques that allowed for the examination of three dimensions: ease of use and satisfaction, information system management, and usefulness. The data obtained can be summarised as follows:

1. Ease of Use and Satisfaction

Based on the responses of 116 respondents, the data regarding the level of satisfaction of users of the PLN Mobile application with regard to ease of use and satisfaction can be summarized as follows:

Ease of Use and satisfaction Dimension

No	Items	Desc	Response				
			STS	TS	KS	S	SS
1	The PLN Mobile application is easy to use	F	0	3	14	76	23
		%	0%	2,5%	12,7%	65,3%	19,5%
		Total (%)	15%			85%	
2	Easy to learn to use the PLN Mobile application	F	1	9	19	57	30
		%	0,8%	7,6%	16,9%	50%	25,4%
		Total (%)	81%			19%	
3	Like the appearance of the PLN Mobile application	F	0	9	19	58	30
		%	0,0%	7,6%	16,9%	50%	25,4%
		Total (%)	76%			24%	
4	The	F	1	8	18	54	35
		%	0,8%	6,8%	16,1%	45,8%	30,5%

No	Items	Desc	Response				
			STS	TS	KS	S	SS
	information in the PLN Mobile application is well organized, so you can easily find the information you need	Total (%)	77%			23%	
5	Feel comfortable when using the PLN Mobile application in a social environment	F	0	3	19	65	29
		%	0,0%	2,5%	16,9%	55,1%	25,4%
		Total (%)	81%			19%	
6	The amount of time spent required in using the PLN Mobile application is appropriate	F	0	10	15	59	32
		%	0,0%	8,5%	13,6%	50%	28%
		Total (%)	78%			22%	
7	Will use the PLN Mobile application again	F	1	8	12	66	29
		%	0,8%	6,8%	11%	56,8%	24,6%
		Total (%)	82%			18%	
8	Overall feel satisfied dengan aplikasi PLN Mobile	F	0	8	12	67	29
		%	0%	6,8%	11%	56,8%	24,6%
		Total (%)	82%			18%	
Jumlah Rata-Rata (%)			20%			80%	

Source: Processed by researchers (2024)

The results of the survey indicate that respondents were generally satisfied with the PLN Mobile application. The average response to each indicator was above 75%, suggesting that ease of use and satisfaction are key factors influencing user satisfaction with the PLN Mobile application. PLN Mobile must remain vigilant in monitoring the aggregate assessment and commentary on the Google Play Store application. reflecting an enhancement in the quality and comprehensive user experience.

2. Information System Configuration

Based on the responses of 116 respondents, the following data regarding user satisfaction with the PLN Mobile application's information system configuration were obtained:

System Information Arrangement Dimensions

No	Items	Desc	Response					
			STS	TS	KS	S	SS	Total
1	Every time you make a mistake while using the PLN	F	1	8	18	76	15	116
		%	0,8%	6,8%	15,3%	64,4%	12,7%	100%
	Mobile application, you can easily and quickly recover it.	Total (%)	22%			78%		
2	This PLN Mobile application provides an	F	0	3	15	60	40	116
		%	0,0%	2,5%	12,7%	50,8%	33,9%	100%
	acceptable way to get electricity services.	Total (%)	15%			85%		
3	This PLN Mobile application provides	F	0	6	19	58	35	116
		%	0,0%	5,1%	16,1%	49,2%	29,7%	100%
	enough information to notify the progress made	Total (%)	21%			79%		

No	Items	Desc	Response					
			STS	TS	KS	S	SS	Total
4	The navigation is consistent when switching screens to other applications	F	2	13	16	51	35	116
		%	1,7%	11%	13,6%	43,2%	30,5%	100%
		Total (%)	23%			77%		
5	This PLN Mobile application provides enough information to notify the progress made	F	0	5	15	65	33	116
		%	0,0%	4,2%	12,7%	55,1%	28%	100%
		Total (%)	17%			83%		
Total Mean (%)			20%			80%		

Source: Processed by researchers (2024)

It can be described that users who experience problems in the application with problems with these aspects. So the PLN Mobile application is expected to continue to strive to improve application performance such as more consistent navigation and speed up the response time of the recovery feature or switching screens to meet the needs and expectations of application users.

Usefullnes Dimensions

No	Items	Desc	Response					
			STS	TS	KS	S	SS	
1	This PLN Mobile application will be useful for electricity information so that it is easier	F	1	8	9	72	28	116
		%	0,8%	6,8%	7,6%	61%	23,7%	100%
		Total (%)	16%			84%		
2	This PLN Mobile application	F	1	8	16	55	38	116
		%	0,8%	6,8%	13,6%	46,6%	32,2%	100%

No	Items	Desc	Response				
			STS	TS	KS	S	SS
	provides access to electricity services	Total (%)	22%			78%	
3	This application helps in managing electricity effectively	F	0	6	16	66	116
		%	0,0%	5,1%	13,6%	55,9%	100%
		Total (%)	19%			81%	
4	PLN Mobile application makes it easier to communicate with electricity service officers	F	1	8	18	54	116
		%	0.8%	6,8%	16,1%	45,8%	100%
		Total (%)	28%			72%	
5	By using the PLN Mobile application, you have more opportunities to interact with electricity service providers	F	3	6	15	64	116
		%	2,5%	5,1%	12,7%	54,2%	116
		Total (%)	21%			79%	
6	The information sent will be well received by the electricity service provider using the PLN Mobile application.	F	2	9	17	57	116
		%	1,7%	7,6%	14,4%	48,3%	100%
		Total (%)	24%			76%	
7	Comfortable when communicating with the electricity service provider when using the	F	0	13	13	67	116
		%	0%	11%	11%	56,8%	100%
		Total (%)	22%			78%	

No	Items	Desc	Response				
			STS	TS	KS	S	SS
	PLN Mobile application						
	Total Mean (%)			22%		78%	

Source: Processed by researchers (2024)

The data results regarding usefulness of the PLN Mobile application illustrate that the average respondent gave a satisfied response, which can be seen from the average for each indicator with a percentage above 70%. Companies must continue to strive to improve the quality of service, especially in the interaction between users and service officers because users expect a fast and real-time response, especially in emergency situations such as power outages.

5.1 Validity Test

The objective of this validity test is to evaluate the suitability of the statements used to describe a variable. The calculated r_{hitung} value, which was tested using the SPSS 27 software with a 10% level of significance, yielded a tabulated r_{tabel} value of 0.2158 based on the n-2 determination method. The following data represent the results of the validity test conducted for this study:

Validity Test of User Satisfaction of PLN Mobile Application

Variabel	Dimensi	r_{hitung}	r_{tabel}	Ket.
User Satisfaction	Ease of Use and Satisfaction	0,622	0,2158	Valid
		0,388	0,2158	Valid
		0,450	0,2158	Valid
		0,428	0,2158	Valid
		0,487	0,2158	Valid
		0,524	0,2158	Valid
		0,495	0,2158	Valid
		0,627	0,2158	Valid
	System Information Arrangement	0,472	0,2158	Valid
		0,574	0,2158	Valid
		0,456	0,2158	Valid
		0,491	0,2158	Valid
	Usefulness	0,436	0,2158	Valid
		0,506	0,2158	Valid
		0,570	0,2158	Valid
		0,516	0,2158	Valid
		0,662	0,2158	Valid

Variabel	Dimensi	rhitung	rtabel	Ket.
		0,604	0,2158	Valid
		0,634	0,2158	Valid

Source: Processed by researchers (2024)

Table 5.1.1 indicate that the alpha Cronbach value is greater than 0.60 for both ease of use and satisfaction dimensions, with a value of 0.902. The information system configuration dimension yielded a value of 0.830, while the application usefulness dimension had a value of 0.915. It can therefore be concluded that the results presented in the above table are reliable, as the reliability test yielded a value of 0.60.

6. Reliability Test

In addition to the validity test, a reliability test is also carried out to test the reliability of each statement contained in the questionnaire. If the respondent's answers to the contents of the questionnaire are stable or consistent over time, it is said to be reliable if the alpha coefficient is > 0.60 .

Variabel	Dimension	Cronbach's Alpha	α standar	Desc
	Ease of Use and Satisfaction	0,902	0,60	Reliabel
User Satisfaction	System Information Arrangement	0,830	0,60	Reliabel
	Usefulness	0,915	0,60	Reliabel

Source: Processed by researchers (2024)

The results of the reliability test (Table 4.3) indicate that the alpha Cronbach value is greater than 0.60 for both the ease of use and satisfaction dimensions, with a value of 0.902. The information system configuration dimension yielded a value of 0.830, while the application usefulness dimension had a value of 0.915. It can therefore be concluded that the results presented in the above table are reliable, given that the reliability test yielded a value of more than 0.60.

7.1 Mean Test

Tabel Mean Test Ease of Use and Satisfaction

Items	Mean
The PLN Mobile application is easy to use	4,0

Items	Mean
Easy to learn to use the PLN Mobile application	4,0
Like the appearance of the PLN Mobile application	3,9
The information in the PLN Mobile application is well organized, so you can easily find the information.	3,9
The information in the PLN Mobile application is well organized, so you can easily find the information you need	4,0
The amount of time spent required in using the PLN Mobile application is appropriate	3,9
Will use the PLN Mobile application again	3,9
Overall feel satisfied dengan aplikasi PLN Mobile	4,0
Mean	4,0

Source: Processed by researchers (2024)

Tabel Mean Test System Information Arrangement Dimensions

Items	Mean
Every time you make a mistake while using the PLN Mobile application, you can easily and quickly recover it.	3,8
This PLN Mobile application provides an acceptable way to get electricity services.	4,1
This PLN Mobile application provides enough information to notify the progress made	4,0
The navigation is consistent when switching screens to other applications.	3,8
This PLN Mobile application provides enough information to notify the progress made	4,0
Mean	3,9

Source: Processed by researchers (2024)

Tabel Mean Test Usefullnes

Items	Mean
This PLN Mobile application will be useful for electricity information so that it is easier	3,9
This PLN Mobile application provides access to electricity services	4,0
This application helps in managing electricity effectively	4,0
PLN Mobile application makes it easier to communicate with electricity service officers	3,8
By using the PLN Mobile application, you have more opportunities to interact with electricity service providers.	3,9
The information sent will be well received by the electricity service provider using the PLN Mobile application.	3,9
Comfortable when communicating with the electricity service provider when using the PLN Mobile application	3,8
Mean	3,9

Source: Processed by researchers (2024)

The overall three-dimensional mean result indicates that the respondents are generally satisfied with the PLN Mobile application, despite the fact that they do not express a high level of satisfaction and several items receive a mean score below 4.0, which indicates that the respondents are satisfied with the application.

8.1 Standar Deviasi Test

Standar Deviasi Test Ease of Use and Satisfaction Dimension

Indikator	<i>N</i>	<i>Mean</i>	<i>Std. Deviation</i>
1	116	4,0	0,65224
2	116	4,0	0,89890
3	116	3,9	0,85184
4	116	3,9	0,90393
5	116	4,0	0,72148
6	116	3,9	0,86939
7	116	3,9	0,83885
8	116	4,0	0,84420

Source: Processed by researchers (2024)

Table 4..5.1 presents the results of an ANOVA conducted with eight indicators on the ease of use and satisfaction of the PLN Mobile application. The data indicate that the lowest and highest values are observed in indicators 1 and 8, respectively. The value of 0.065224 indicates that the respondents' responses were highly consistent, whereas the figure of 0.90393 suggests a notable degree of variation in their responses. Overall, the results of the standard deviation test indicate a relatively consistent pattern in the responses provided.

Standar Deviasi Test System Information Arrangement Dimension

Indikator	<i>N</i>	<i>Mean</i>	<i>Std. Deviation</i>
1	116	3,8	0,76799
2	116	4,1	0,73359
3	116	4,0	0,81220
4	116	3,8	1,01956
5	116	4,0	0,76088

Source:

Processed by researchers (2024)

The data in Table 4.5.2 was used as the basis for this analysis. The standard deviation was calculated using five indicators on the dimension of PLN Mobile's information application system. The resulting data indicated a range of 0.7335, which was the lowest value, and 1. The highest value, 0.1956, indicates the greatest variation in indicator four, which describes the inconsistency of the respondents' responses to indicator four. The results of the standard deviation test are therefore not consistent, as there is a significant variation between indicators three and four.

Standar Deviasi Test Usefullnes Dimension

Indikator	<i>N</i>	<i>Mean</i>	<i>Std. Deviation</i>
1	116	4,0	0,81822
2	116	4,0	0,90393
3	116	3,9	0,77455
4	116	3,9	1,00236
5	116	4,0	0,90687
6	116	3,9	0,94318
7	116	3,9	0,87008

Source: Processed by researchers (2024)

The data in Table 4 were analysed. The standard deviation test was conducted using seven indicators on the PLN Mobile application usability dimension. The results indicated a range of 0.77455, which is the lowest recorded value, suggesting that respondents tended to be consistent in their responses to indicator three. Conversely, the highest recorded value, 1.00236, indicated a greater degree of variation in the respondents' responses. The results of the standard deviation test are not consistent, as the standard deviations of the seven indicators exhibit significant variation.

9.1 T Test

This study also employs a t-test for each dimension to ascertain whether there are significant differences in the measurements, with a 5% ($\alpha = 0.05$) level of significance. A significant difference is indicated when the p-value is less than 0.05. The t-test is conducted using the independent t-test function in the software SPSS 27, and the resulting t-values are :

		<i>N</i>	<i>df (N-2)</i>	<i>t-value</i>	<i>p-value</i>
Gender	Man	48	114	-1,250	0,214

		<i>N</i>	<i>df (N-2)</i>	<i>t-value</i>	<i>p-value</i>
	Women	68			
Age	17-28 Years	56	114	2,201	0,030
	> 28 Years	82			
Employee	Employee	55	114	1,642	0,103
	Non-Employee	61			
Domicile	Jakarta	48	114	-1,987	0,050
	Non-Jakarta	68			

Source: Processed by researchers (2024)

Based on the characteristics of the respondents in the domicile category, the p-value is less than 0.05, indicating a significant difference between the non-Jakarta and Jakarta groups. Conversely, no significant differences were observed with regard to gender, with a p-value exceeding 0.05, indicating no notable discrepancies. The status group was also found to exhibit no significant differences with regard to the status category. However, with a p-value less than 0.05, the age group was found to have a significant difference. This is because Generation Y and Generation Z have different approaches to technology use, with Generation Z demonstrating greater digital skill acquisition (Widya, 2020). The significant difference observed in the domicile category is attributable to the p-value exceeding 0.05. It can be concluded that there is no statistically significant difference between the perceptions of men and women. Similarly, the age and employment status groups exhibited comparable perceptions regarding user satisfaction with the ease of use and overall satisfaction dimensions, indicating that all user groups indicated ease of use.

		<i>N</i>	<i>df (N-2)</i>	<i>t-value</i>	<i>p-value</i>
Gender	Man	48	114	-1,250	0,214
	Women	68			
Age	17-28 Years	89	114	1,910	0,590
	> 28 Years	27			
Employee	Employee	55	114	0,462	0,645

		<i>N</i>	<i>df (N-2)</i>	<i>t-value</i>	<i>p-value</i>
	Non-Employee	61			
Domicile	Jakarta	52			
	Non-Jakarta	64	114	-0,2330	0,022

Source: Processed by researchers (2024)

Based on the characteristics of the respondents, there is no significant difference between the sexes, with a p-value greater than 0.05, and thus no difference is assumed to exist. With regard to age, the p-value was found to be greater than 0.05, indicating no significant difference. Furthermore, the status group was also found to exhibit no significant differences. Similarly, no significant differences were observed in the domicile group. It can be concluded that there are no significant differences overall in the dimensions of information system and configuration, indicating that all user groups have indicated that the system configuration.

		<i>N</i>	<i>df (N-2)</i>	<i>t-value</i>	<i>p-value</i>
	Man	48			
Gender	Women	68	114	-2,494	0,014
	17-28 Years	18			
Age	> 28 Years	46	114	0,497	0,620
	Employee	0			
Employee	Non-Employee	154	114	-0,0713	0,447
	Jakarta	5			
Domicile	Non-Jakarta	22	114	-1,509	0,134

The results indicate that, based on the characteristics of the respondents, there is no significant difference between the sexes. The p-value is greater than 0.05, indicating that there is no significant difference between the groups in terms of status, age, and domicile. Furthermore, the results demonstrate that there is a significant and consistent difference in responses between the groups. This is an invaluable tool for managing electricity, from complaints to transactions, in an

expedient and efficacious manner. It is in accordance with the aforementioned dimensions, namely utility and functionality.

5. Conclusion

Based on the analysis of the research study entitled "An Analysis of User Satisfaction with the PLN Mobile Application in Jabodetabek," the following conclusions is the mean analysis of each user satisfaction dimension, namely ease of use, system information arrangement, Furthermore, the usefulness dimension exhibited a mean score of 4.0 on the ease of use scale, indicating a satisfactory level of satisfaction (3.40–4.20) in accordance with the rating scale. Furthermore, the system information arrangement dimension exhibited a mean value of 3.9, indicating a satisfactory level of satisfaction (3.40–4.20). Furthermore, the ease of use dimension exhibited a mean value of 3.9, indicating a satisfactory level of ease (3.40–4.20). This indicates that the three dimensions of this study have a significant impact on user satisfaction with the PLN Mobile application.

6. Implication

The results of this study indicate that users are satisfied with the ease of use of the application and would be willing to increase their satisfaction with a more intuitive and user-friendly interface that is accessible to all users. As evidenced by the descriptive analysis, 85% of users of the PLN Mobile application. The study also illustrates the system information arrangement dimension, which indicates that users are satisfied with the improvements made and recognise the importance of management. The second indicator, which pertains to the quality of information provided by the application, indicates that 85% of respondents agree that the application offers an acceptable means of obtaining electricity services. The results of this study indicate that users perceive the PLN Mobile application to be effectively and efficiently managed, leading to a notable increase in user satisfaction. Therefore, it can be concluded that PT PLN Persero should to develop the application in order to enhance user satisfaction even further.

7. Recommendation

The recommendation for future research is as follows:

1. It is recommended that future researchers employ the cluster sampling technique when gathering data, as this can assist in subsequent studies by enabling a more

comprehensive identification of specific groups within a given subpopulation (Yuni et al., 2020).

2. In future research, it is recommended that samples be taken more evenly to prevent dominance in specific regions. This will ensure the most comprehensive and representative results, allowing for broader exploitation in subsequent studies (Fadhila et al., 2022).

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