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Application of Digital Marketing Implementation of Perusahaan Listrik Negara (PLN) Mobile to Improve Customer Service at the Bukittinggi Customer Service Unit

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ABSTRACT: This study aims to analyze the role of PLN Mobile in improving customer service by implementing digital marketing strategies in the digital transformation era. The main issue raised is how customers respond to PLN Mobile regarding the speed and quality of service and whether this application can accelerate the process of service requests and complaint handling. This study uses a survey method by distributing questionnaires to PLN Bukittinggi Customer Service Unit customers who use the PLN Mobile application. Samples were taken based on customer electricity (900, 1300, 2200, >2200 watts). The analysis results show that most respondents agree that PLN Mobile can accelerate the implementation of service requests, provide quick responses to complaints, and accelerate response times to power outages. These findings indicate that implementing digitalization through PLN Mobile positively impacts customer service, especially speed and accuracy. In conclusion, PLN Mobile effectively supports PLN's digital transformation and improves customer experience.

Keywords: PLN Mobile, Digitalization, Customer Service, Digital Marketing, Digital Transformation.

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INTRODUCTION

It is a fact that the need for energy, especially electrical energy in Indonesia, is increasingly becoming an inseparable part of people's daily living (Teknologi & Uda, 2022a). The electricity demand has continued to increase significantly worldwide, including in Indonesia, driven by population growth and rapid technological advancements(Prastika, 2023). This rising demand places significant pressure on the State Electricity Company (PLN), responsible for producing, distributing, and selling electricity in Indonesia (Adam et al., n.d.).As the primary provider of public electricity services, PLN is critical in ensuring a stable and affordable electricity supply across all levels of society, reaching from major urban centers to remote areas (Misbahuddin et al., 2024)

To meet these growing demands, PLN has undergone numerous transformations since its establishment in 1945, including infrastructure expansion, increased generation capacity, and adoption of advanced technologies in its operational management. These transformations have

bolstered PLN's service capacity and contributed to economic growth by providing a reliable electricity supply crucial for industrial, commercial, and other sectors(Vaidya et al., 2021).

In the era of Industry 4.0, digital transformation has become a key factor for organizations seeking to enhance efficiency, flexibility, and competitiveness (Gunawan, A., 2024). PLN, aligning with this trend, has embarked on its digital transformation journey, which includes the implementation of PLN Mobile. As a digital marketing initiative, PLN Mobile aims to improve customer experience by offering easier access to services, such as bill payments, service requests, and outage reporting (Kusuma & Rahim, 2021). However, as with any new technology, the success of PLN Mobile depends not solely on its functionality but also on customer acceptance and satisfaction

Previous research and what is new in this study highlight the opportunities and challenges posed by digital transformation for utility companies globally. Studies have shown that digital tools in the utility sector can enhance operational efficiency and customer engagement, significantly impacting service speed and quality (Balqqis Zacqualine et al., 2024). However, limited studies specifically address digital transformations within Indonesian utilities, especially focusing on customer perceptions and experiences with applications like PLN Mobile. This research addresses a gap by exploring the adoption of PLN Mobile as a case of digital marketing innovation in the utility sector, focusing on its impact on customer service and satisfaction.

This study aims to investigate the role of digital marketing in implementing PLN Mobile to enhance customer service within PLN. Specifically, it examines how well PLN Mobile meets customer expectations regarding service speed and quality while identifying the challenges PLN faces in digitalizing its services. By understanding these aspects, the study provides insights for improving customer satisfaction through enhanced digital service delivery. The findings offer a comprehensive overview of PLN Mobile's role in PLN's digital marketing strategy, along with practical recommendations for further development. These insights align with PLN's broader objective of achieving greater service efficiency and customer satisfaction.

From a practical standpoint, the study suggests actionable strategies for PT PLN (Persero) ULP Bukittinggi. These include intensifying socialization and education efforts to familiarize customers with the ease and benefits of using PLN Mobile through marketing campaigns, training, or workshops. Moreover, continuous improvements to the application’s interface and features are essential to ensure accessibility for various customer segments, including those less familiar with technology.

Theoretically, this study contributes to the literature on digitalizing public services by reinforcing that adopting digital technology, such as mobile applications, can enhance service quality. This is achieved by accelerating processes, increasing accuracy, and strengthening the relationship between service providers and customers (Rogers, n.d.-a). Additionally, it expands the understanding of how digital transformation can be applied in the public sector to create more responsive and customer-oriented services.

METHOD

This study uses a survey method, which is often used to collect data from respondents who represent a certain population. This survey method is suitable for exploring respondents' views, perceptions, and experiences of implementing digital marketing using the PLN Mobile application at Bukittinggi Customer Service Unit. This survey is equipped with a questionnaire to obtain responses about the topic or phenomenon being studied (Sugiyono, S., & Lestari, P., 2021).

This study focuses on implementing digital marketing to improve customer service at the Bukittinggi Customer Service Unit (ULP). Its object is the PLN Mobile application, and its locus is the PLN Bukittinggi Customer Service Unit work area, which includes various customer groups based on electricity subscription capacity.

The population in this study includes all PLN Bukittinggi Customer Service Unit customers who use the PLN Mobile application. This population comprises customers with various levels of electricity power, namely 900 watts, 1300 watts, 2200 watts, and more than 2200 watts. Samples were taken using several sampling methods to ensure a good population representation. Samples were taken based on certain criteria: customers using the PLN Mobile application in the PLN Bukittinggi Customer Service Unit work area. Samples were grouped based on electricity subscription power, namely 900 watts, 1300 watts, 2200 watts, and more than 2200 watts. Ten respondents represent each customer group (based on electricity power). Determination of respondents was carried out non-randomly, based on ease of access and availability of respondents.

This study's respondents were PLN Bukittinggi Customer Service Unit customers who used the PLN Mobile application. Respondents were selected from various existing electricity power groups, with a quota of 10 respondents per electricity power group.

Data were collected using a questionnaire to obtain information about customer experiences and perceptions regarding the PLN Mobile application. This questionnaire includes questions related to customer satisfaction, ease of use, feature effectiveness, and the impact of digital marketing on user experience.

After the data was collected, the data was tabulated based on question numbers for all customer groups based on electricity power (900 watts, 1300 watts, 2200 watts, and more than 2200 watts). Data analysis was carried out using descriptive statistical methods to describe the characteristics of respondents and identify trends or patterns in the data. In addition, a comparative study was carried out to see the differences or similarities between customer groups based on the electricity they use. The analysis results were then interpreted to answer the research questions and make relevant recommendations.

RESULT AND DISCUSSION

After conducting a data recapitulation according to the survey method adapted from (Sugiyono, S., & Lestari, P. (2021). Metode Penelitian Komunikasi (Kuantitatif, Kualitatif, Dan Cara Mudah Menulis Artikel Pada Jurnal Internasional)., n.d.) based on the electrical power group, namely 900 watts, 1,300 watts, 2,200 watts, and more than 2,200 watts, the recapitulation was carried out by combining the opinions of all respondents without differentiating based on power. This was done

to obtain an overall picture of the use of the PLN Mobile application in improving customer service and customer satisfaction with the results and response time of service request execution (PB/PD/PS), service complaints, and reports of disruptions experienced by customers. The following is a discussion of the results of respondents' opinions based on the six variables used in the study.

1. Acceleration of Service Request Execution

Evaluation of the acceleration of service request execution (PB/PD/PS) through the PLN Mobile application shows that 50% of respondents strongly agree, 40% agree, 7.5% disagree, and 2.5% disagree. These results reflect that the PLN Mobile application can execute service requests faster. This is due to the automation of the recapitulation of customer requests, where each request goes directly to the WO (Work Order) officer so that the data and history of the application process stages can be seen more clearly. In addition, with monitoring and notifications in the application, each request can be ensured to be executed properly. For more details, see Figure 1.

Table 1. Results of Service Request Execution Acceleration

Category	Percentage (%)
Strongly Agree	50%
Agree	40%
Disagree	7.5%
Disagree Completely	2.5%

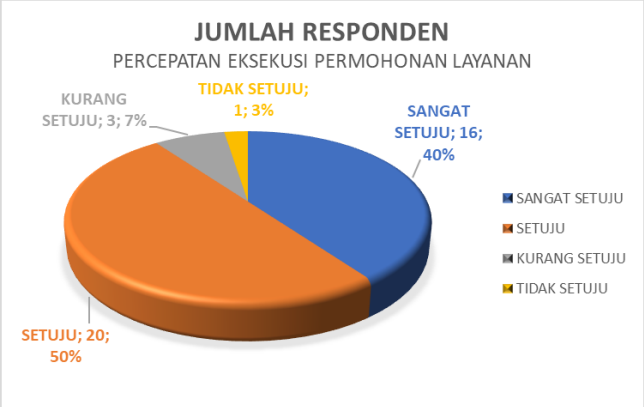

Figure 1. Result Acceleration of Service Request Execution

2. Provision of Fast and Accurate Answers to Complaints

Based on respondents' opinions regarding the speed and accuracy of answers to complaints experienced (service complaints, difficulties in filling tokens, difficulties in purchasing tokens, etc.), there were 45% of respondents strongly agreed, 40% agreed, 12.5% disagreed, and 2.5% disagreed at all. These results indicate that customers can easily report complaints and get appropriate responses and accurate handling. This can increase customer satisfaction, improve the company's image, and increase the bond between the company and its customers. For more details, see Figure 2.

Table 2. Results of Providing Fast and Accurate Answers to Complaints

Category	Percentage (%)
Strongly Agree	45%
Agree	40%
Disagree	12.5%
Disagree Completely	2.5%

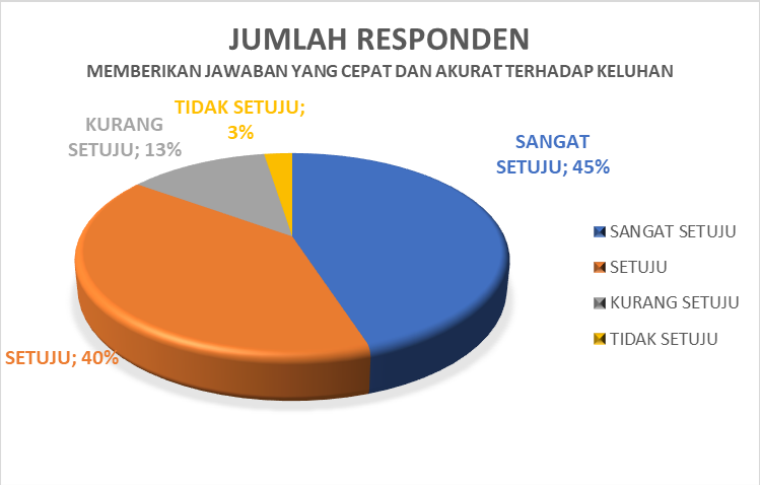

Figure 2. Result Providing Fast and Accurate Answers to Complaints

3. Acceleration of response time to disturbances experienced by customers

Based on the speed of response time to disruptions reported by customers through the application until the customer is contacted again and the execution of the reported disruption, 60% of respondents strongly agree, 35% agree, 5% disagree, and 0% disagree. These results reflect that PLN is very serious and transparent in handling electricity problems experienced by customers. PLN's policy that gives customers the freedom to provide reviews and star ratings for the performance of officers and applications also supports this. For more details, see Figure 3.

Table 3. Results of Response Time Acceleration to Customer Disturbances

Category	Percentage (%)
Strongly Agree	60%
Agree	35%
Disagree	5%
Disagree Completely	0%

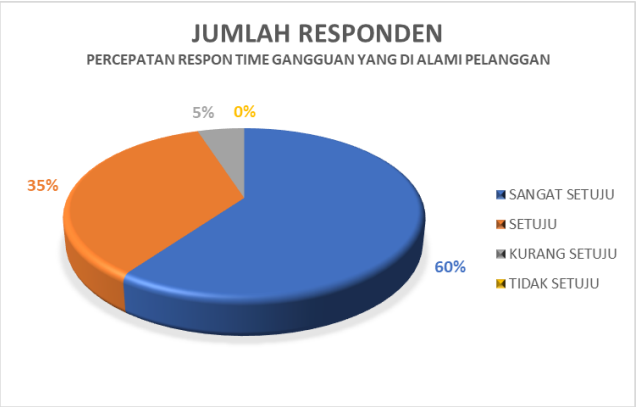

Figure 3. Acceleration of response time to disturbances experienced by customers

4. Obstacles in Using the PLN Mobile Application

Obstacles are normal in every activity, as is the use of the PLN Mobile application. This study found that customers still do not use smartphones, so they cannot install the PLN Mobile application and do not feel its benefits. Furthermore, some customers still do not know the PLN Mobile application, so they have not installed it. Lastly, many customers have only ever used one or two of these superior features.

Based on the results obtained, it can be concluded that the use of the PLN Mobile application can significantly increase customer satisfaction through accelerated service execution, providing fast and accurate answers to complaints, and accelerating response time to disruptions experienced by customers. However, obstacles in technology accessibility and customer knowledge of the application are still challenges that PLN needs to overcome to achieve wider and optimal adoption.

This study provides an important contribution to understanding the role of digitalization through mobile applications in improving the quality of public services. In the context of digital transformation, this finding aligns with the literature stating that mobile applications can improve operational efficiency and customer satisfaction through automation and transparency of service (Rogers, 2016). In the future, it is recommended that PLN increase education and promotion regarding the PLN Mobile application to customers and strive for programs that can reach customers who do not have smartphones.

CONCLUSION

Based on the discussion above, the authors conclude that ease of Access to Services The PLN Mobile application allows customers to submit service requests anytime and anywhere. This shows that digitalizing services through mobile applications provides better flexibility and accessibility for customers, increasing efficiency and customer satisfaction. In addition, fast and Accurate Response to Complaints The PLN Mobile application ensures that every customer complaint is considered, monitored, and responded to quickly and accurately. This reflects the improvement in service quality achieved through transparency and accountability obtained from digital technology. Acceleration of Disruption Handling Reporting of power outages through the PLN Mobile

application is answered quickly and followed by comprehensive action. This confirms PLN's commitment to providing responsive and effective services, ultimately increasing customer trust and satisfaction.

Based on the research results, several suggestions that can be given to PT PLN (Persero) ULP Bukittinggi include:

From this research, we suggest that the company is advised to hold a more intensive socialization program regarding the PLN Mobile application, including its benefits and how to use it so that more customers can experience the convenience offered. Furthermore, we recommend that PT PLN (Persero) continue developing the application by paying attention to customer feedback to improve user experience and ensure all customer groups can use the application optimally.

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