

The Role of Service Staff in Digitalization at PT. PLN (Persero) ULP Rungkut

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Abstract

This study aims to analyze the role of service staff in supporting digitalization at PT PLN (Persero) Rungkut Customer Service Unit (ULP). In the digitalization process, service staff play a strategic role as the spearhead of interaction with customers, especially in implementing technologies such as the PLN Mobile application and smart metering. This research uses various references from relevant journals to understand how service staff can contribute to the success of digital transformation in the utility sector. This study concludes that the success of digital transformation in PLN ULP Rungkut is highly dependent on the ability of service staff to carry out their roles. Therefore, PLN needs to improve training for staff, provide adequate infrastructure, and educate customers to support the effective adoption of digital services.

Keywords: digitalization, service staff, PLN, smart meter, digital transformation.

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I. Introduction

PT PLN (Persero) ULP Rungkut functions as a key customer service unit under the Unit Pelaksana Pelayanan Pelanggan (UP3). It is tasked with managing customer interactions and maintaining the electricity distribution network within a specific geographic area. As a crucial part of the national electricity provider, PT PLN (Persero) ensures that electricity, a fundamental necessity in today's digital age, is delivered reliably and efficiently to millions of Indonesians. The significance of electricity in modern life cannot be overstated; it powers homes, industries, and essential infrastructure, driving economic growth and societal progress. With the increasing demand for energy driven by population growth and rapid technological advancements, PT PLN faces mounting pressure to maintain not only supply reliability but also the highest standards of customer service.

In today's highly competitive landscape, customers' expectations extend beyond a stable electricity supply. They seek swift, friendly, and effective services that address their needs with minimal friction. Customer satisfaction serves as a cornerstone for assessing the success of service-based organizations, influencing both customer loyalty and corporate reputation (Wahyudi et al., 2024). For PT PLN (Persero), the challenge lies in balancing the growing volume of customers with the demand for superior service quality. Additionally, the company must contend with external pressures such as global climate change, which impacts the sustainability and resilience of electrical systems. These challenges necessitate a proactive approach, incorporating innovation and advanced technologies to meet evolving needs.

Digitalization has emerged as a transformative solution to address these challenges, reshaping how PT PLN (Persero) conducts its operations and delivers services. Over recent years, the company has embraced digital technologies to enhance operational efficiency, streamline processes, and elevate customer experience. From automating internal workflows to developing customer-centric applications like PLN Mobile, digitalization is at the forefront of PLN's strategy. Platforms like PLN Mobile empower customers by providing easy access to services such as bill payments, complaint submissions, and new service requests. These tools represent a significant leap in accessibility and convenience, aligning with modern consumer expectations for on-demand and seamless interactions.

However, the implementation of digital technologies is not without its challenges. The success of digitalization initiatives hinges not only on the sophistication of the technologies employed but also on the readiness and adaptability of human resources (Gunawan, 2021). Service staff, in particular, play a pivotal role in bridging the gap between customers and digital systems. They are tasked with ensuring the seamless operation of these technologies, assisting customers in navigating digital tools, and resolving issues that automated

systems may fail to address. As such, their skills, training, and willingness to adapt to technological advancements are critical determinants of the success of digital transformation efforts.

The role of service staff extends beyond technical facilitation. They act as the human interface of the organization, embodying its commitment to customer care and satisfaction. Their ability to empathize with customers, provide timely assistance, and troubleshoot complex issues adds a personal touch that enhances customer trust and loyalty. In the context of PT PLN (Persero), service staff must balance their traditional responsibilities with the demands of a rapidly evolving digital landscape. This dual role underscores the importance of continuous professional development and robust support systems to equip staff with the tools and knowledge they need to excel.

The challenges faced by service staff in adapting to digitalization are multifaceted. On one hand, they must acquire technical proficiency in using new digital tools and platforms. On the other hand, they must address resistance to change, both within the organization and among customers who may be less familiar with digital interfaces. Effective training programs and change management strategies are essential to overcome these hurdles, fostering a culture of innovation and adaptability (Gunawan, 2021). Additionally, organizations must prioritize feedback mechanisms to refine digital tools and ensure they meet the practical needs of both staff and customers.

This paper aims to explore the critical role of service staff in supporting digitalization efforts at PT PLN (Persero), with a specific focus on the operations of ULP Rungkut. It seeks to evaluate how digital technologies influence staff productivity and the quality of customer interactions. By examining the interplay between technology and human resources, the study aims to identify best practices and potential areas for improvement. Moreover, it will address the broader implications of digital transformation for operational efficiency and organizational culture.

The analysis presented in this paper draws on a combination of observational data, staff interviews, and literature reviews conducted during an internship program. This comprehensive approach ensures a nuanced understanding of the dynamics at play, capturing both the opportunities and challenges of digitalization from the perspective of frontline service providers. By delving into these insights, the paper aims to contribute to the ongoing discourse on digital transformation, offering practical recommendations to enhance service delivery and customer satisfaction.

One of the key objectives of this study is to highlight the interconnectedness of technology and human effort in achieving organizational goals. While digital tools can automate routine tasks and streamline workflows, the human element remains indispensable, particularly in contexts requiring empathy, creativity, and problem-solving. For PT PLN (Persero), striking the right balance between technological innovation and human expertise is essential to sustaining its position as a trusted provider of electricity and related services.

The findings of this study are expected to have broader implications for organizations navigating similar transitions toward digitalization. By shedding light on the experiences of PT PLN (Persero), the paper aims to provide a roadmap for other service-oriented organizations seeking to leverage technology while maintaining a strong focus on customer-centric values. Ultimately, the goal is to demonstrate that digital transformation is not merely a technological endeavor but a holistic process involving people, processes, and culture.

III. Literature Review

Digitalization and transformation of public services

Digitalization can be interpreted as the use of digital technology with the aim of improving the ability to replace business processes that were previously carried out using manual methods. In the company PT PLN (Persero), digitalization refers to the use of digital information technology to facilitate and accelerate various services to customers, which includes from bill payments to customer complaint management. Specifically in customer service, digitalization is very influential in accelerating response times, improving the accuracy of customer data, and providing 24/7 services through digital platforms such as the PLN Mobile application.

Even though many processes have been automated or made easy with technology, basically service staff will still have an active role in running this digital system effectively. Service staff also have the responsibility to ensure that the technological processes used function properly, provide assistance to customers in need, and can assist customers in managing problems or complaints that cannot be solved using an automated system.

Information system theory and its influence on the performance of service staff

According to Information Systems Theory (Laudon & Laudon, 2019), a good information system will improve operational efficiency and service quality in an organization. PT PLN implements an information system that is applied in digitalization by using the PLN Mobile application which is used for payments, power change services, new installations, complaints, temporary connections, SPKLU and many more. This allows service staff to work more efficiently with access and relevant data. Service staff can also easily check billing history, complaint status, and other requests in a timely manner, and allow staff to provide a quick and accurate response to customers.

A good information system is not only beneficial to one party, but also very important for the empowerment of service staff. Through training and skill development in using digital systems, staff can also increase their capacity to handle complex problems, adapt to rapid changes in technology, and improve their ability to provide better solutions to customers. Training and adaptation are also carried out to understand and master the newly implemented digitalization system.

Change Management Theory and Service Staff Adaptation

Digitalization at PT PLN not only affects technology but can also affect the organizational structure and how services work. **Change Management Theory** (Kotter, 2019) explains that technological change must be accompanied by changes in the way organizations work, as well as how individuals in the organization (in this case, service staff) adapt to those changes.

During the transition period in the era of digitalization, implementing effective change management is very important to help the service process carried out, from reducing resistance to change to providing psychological and technical support that helps ensure success in the era of digitalization.

Service quality theory (SERVQUAL) and the influence of digitalization on customer satisfaction

According to (Parasuraman, Zeithaml, & Berry, 1985) SERVQUAL theory can be interpreted as five dimensions of service quality, namely reliability, responsiveness, assurance, empathy, and physical evidence. In PT PLN companies, digitalization can help play a role in improving these dimensions, but the success or success in this digitalization also depends on the service staff in maintaining good service quality. The role of staff does not only depend on technology, but also as a link between customers and existing technology systems

- a) The reliability of the service provider plays an active role in perfecting the system used at PT PLN can always be used properly.
- b) Responsiveness in the implementation of problems, of course, customers face several obstacles in using digital systems. The role of the service staff here is very active in helping providers of fast and appropriate assistance to help solve problems faced by customers.
- c) The assurance of trained and competent service officers can increase the level of security felt by customers, because officers can explain problems and handle problems quickly and appropriately.
- d) Empathy in addition to services that can be accessed through digital, there are several situations where customers have not been able to access digital services because there are some customers who are not familiar with technology, here the role of service staff must be empathetic to help complete the services desired by customers.
- e) Physical evidence of digitization can reduce the use of physical documents, thus service staff have an active role to maintain aspects of human interaction by enforcing digital media such as live chat, phone or video call.

Performance theory and the influence of technology on the productivity of service staff

According to (Campbell, 1990) performance theory explains that individual performance in an organization is influenced by various factors, including ability, opportunity, and motivation. In the concept of digitalization at PT PLN, the technology used can develop capabilities and help service staff in completing the tasks carried out more quickly and precisely. In addition, digitalization also makes it easier to access information and accelerate services.

Technology is now one of the facilitators of service staff. However, it still cannot replace the role as a whole. Customers still need a human touch to customers. Therefore, the role of service staff will remain vital even though it has been assisted by technology.

Theory of the relationship between humans and technology

The theory of human relations and technology states that although technology can improve various operational aspects in an organization, human interaction with technology must be maintained optimally. In the service concept applied to PT PLN, it is necessary to have the skills to manage and interact with digital technology, and also be able to understand how the technology can help customers in providing good service for customers. Technology makes the process simpler, but with more complex problems and context-based decisions, service staff still play an important role.

Research by Pangandaheng et al., (2022) entitled *Transformasi Digital: Sebuah Tinjauan Literatur pada Sektor Bisnis dan Pemerintah* explains that digitalization encourages efficiency in public services, accelerates administrative processes, and improves customer experience. This research shows the important role of staff in utilizing technology to support the success of digital transformation.

Based on the journal matrix used, the main findings show that:

1. *Transformasi digital meningkatkan efisiensi operasional dan kepuasan pelanggan* (Digital Transformation in Public Services: A Case Study of Utilities, John Doe & Jane Smith, 2020).
2. *Staf pelayanan berperan penting dalam edukasi pelanggan terkait teknologi baru seperti smart meter* (The Role of Customer Service in Implementing Smart Technologies, Ahmad Setiawan & Lina Kusuma, 2021).
3. *Tantangan utama digitalisasi adalah literasi digital pelanggan yang rendah dan keterbatasan infrastruktur teknologi* (Challenges of Digitalization in Public Utility Services, Sarah Anderson, 2019).
4. *Pelatihan intensif mampu meningkatkan kesiapan staf dalam menghadapi digitalisasi* (Impact of Training Programs on Staff Readiness for Digital Transformation, Brian Lee & Rina Putri, 2020).
5. *Layanan digital seperti aplikasi mobile memberikan pengalaman pelanggan yang lebih baik, namun tetap membutuhkan dukungan staf pelayanan* (Digital Customer Experience in Energy Utilities: Insights and Trends, Megan Cooper & Albert Wong, 2021).

III. Writing Method

The writing method in this report uses a descriptive qualitative approach (Nayar & Stanley, 2014), which was chosen because it is able to describe in depth the role of service staff in the context of digitalization at PT PLN (Persero) based on data obtained during the internship activities. Data was collected through several methods, namely observation, interviews, documentation, and literature studies.

During the observation, the author observed the activities of service staff in the work environment of PT PLN, especially their interaction with the digitalization-based work system. In the interview, the author dialogued with service staff, supervisors, and related management to explore in-depth information about the role of staff in supporting the implementation of digitalization, the challenges faced, and the opportunities available. Relevant documentation, such as work procedures, internal reports, and digitalization policies, is also collected to support the analysis. Literature studies are conducted to understand the context of digitalization more broadly.

This internship activity involves several stages, starting from planning, implementation, data analysis, to reporting. In the planning stage, the author prepares an internship activity plan and determines the focus of observation and interviews. Implementation includes direct observation, interviews, and collection of related documents. The data obtained was then analyzed descriptively to identify the role and contribution of service staff to the digitization process. The results of this analysis are reported by providing recommendations for strengthening the performance of staff who support digitalization at PT PLN.

This methodology allows the author to comprehensively describe the contribution of service staff to the success of digitalization and provide useful input for the company's development.

IV. Discussion

History

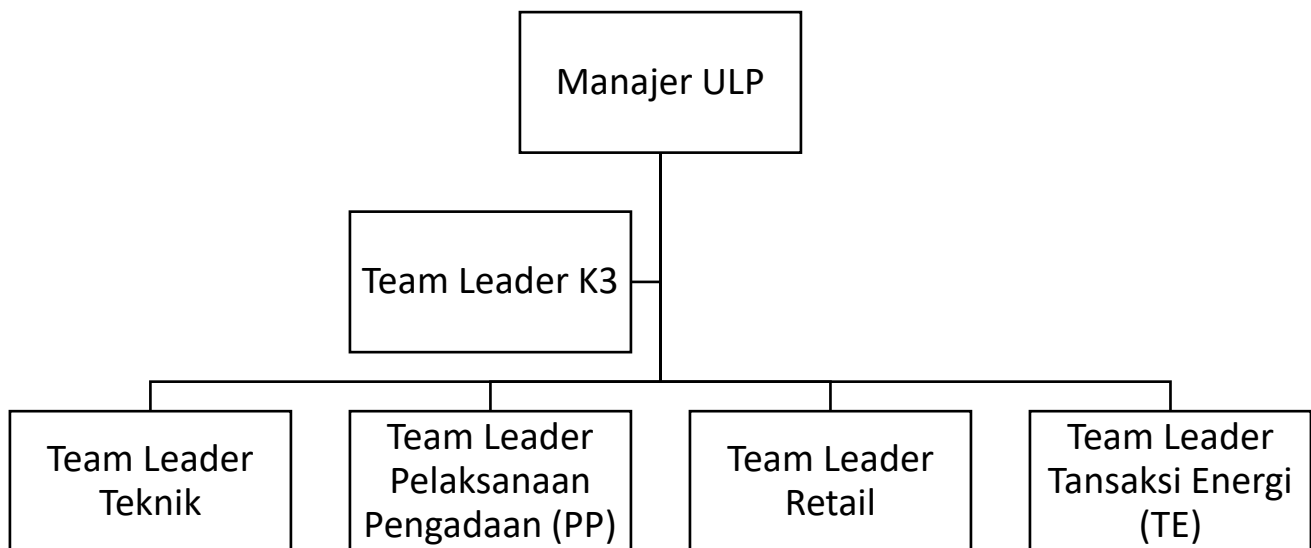
The development of electricity in Indonesia began in the 19th century, starting with the establishment of several Dutch companies that focused on sugar factories and several factories that set up power plants for their own needs. Around 1942-1945 there was a change in the management of Dutch companies by the Japanese. Precisely after the Dutch surrendered to the Japanese army at the beginning of the World War.

At the end of World War II, precisely in August 1945, there was a change of power with the surrender of Japan to the Allies. This moment was taken advantage of by the youth and electricity workers who, through a delegation of electricity and gas workers and employees together with the central KMI leadership, took the initiative to meet President Soekarno. They proposed that the companies be handed over to the government of the Republic of Indonesia. Finally, on October 27, 1945, President Soekarno established the Electricity and Gas Office under the Department of Public Works, with an electric power generation capacity of 157.5 MW.

On January 1, 1961, the Electricity and Gas Position was changed to BPUPLN (General Executive Board of the State Electricity Company) which focuses on the management of electricity, gas, and coke. However, BPUPLN was dissolved on January 1, 1965. At the same time, the government inaugurated two state companies, the State Electricity Company (PLN) to manage state-owned electricity and the State Gas Company (PGN) to manage gas.

In 1972, based on Government Regulation No. 17, the status of the State Electricity Company (PLN) was determined as a public electricity company with the role of Electricity Business Proxy (PKUK) in charge of providing electricity for the public interest. Along with the government's policy that opened opportunities for the private sector in the business of providing electricity, in 1994 PLN's status changed from a public company to a company (persero), while still carrying out its duties as a PKUK in providing electricity for the public interest until now.

Organizational Structure of Internship Partners



PT The organizational structure of PT PLN (Persero) ULP Rungkut consists of several main positions that have their respective duties and responsibilities in supporting the company's operations. The position of the manager is the main leader who is in charge of coordinating work programs and budgets to ensure the achievement of unit performance. In addition, managers are also responsible for supervising the implementation of electricity safety guidelines (K2) and K3 for the safety of employees at work, optimizing the operation and maintenance of distribution networks to maintain the reliability of electricity supply, as well as controlling the implementation of customer administration, financial management, and company revenue. Managers also play a role in conducting technical evaluations of the operating system and maintenance of the distribution network and have the authority to sign administrative documents such as Work Orders (SPK) and contracts in accordance with their authority.

Under the manager, there is an engineering supervisor who is responsible for various technical aspects, including improving the reliability of distribution network operations and maintaining the network. The engineering supervisor also manages distribution construction assets, supervises the implementation of the Cost Budget Plan (RAB), and ensures that the preparation and implementation of connection and disconnection work are carried out in accordance with the provisions. In addition, the engineering supervisor coordinates the technical service officer and controls the service of interference on the network.

In addition, the supervisor position is in charge of fostering and implementing the generation system, which includes operation, maintenance, and plant efficiency management strategies. Supervisors also prepare construction activity plans, prepare policies related to environmental management and electricity safety, and make Work Plans and Company Budgets (RKAP) that are relevant to their fields. In external affairs, supervisors are often representatives of the company to establish working relationships related to the field of power generation.

This organizational structure is designed to ensure that each function runs optimally, so that it is able to support PT PLN (Persero) ULP Rungkut's efforts in achieving the company's targets, both in terms of operations and services to customers.

Production Activities

PT PLN (Persero) is a state-owned company that focuses on the electricity sector, with its main activities including the supply and distribution of electrical energy throughout Indonesia. Production activities in this company involve several main aspects, which begin with the generation of electrical energy. PLN uses various types of power plants, including Steam Power Plants (PLTU) that use coal as the main fuel, Hydroelectric Power Plants (PLTA) that use hydropower from dams or river flows, as well as Gas Power Plants (PLTG) and Steam Gas Power Plants (PLTGU) based on natural gas or LNG. In addition, PLN also utilizes renewable energy sources such as Solar Power Plants (PLTS), Geothermal Power Plants (PLTP), and Wind Power Plants (PLTB).

After electrical energy is generated, PLN manages the transmission system to distribute electricity on a large scale to various regions. This transmission system involves a network of high-voltage cables that ensure electrical energy can reach the distribution substation reliably. Furthermore, PLN distributes electricity from substations to customers, both households, industries, and businesses. This distribution process uses medium and low voltage networks designed to reach customers in urban to remote areas.

In addition, PLN is also active in the management of new and renewable energy (NRE) as part of its commitment to support the clean energy transition. These activities include the development of renewable energy-based plants such as solar, wind, and biomass to reduce dependence on fossil fuels. Infrastructure operations and maintenance are an integral part of PLN's production activities, including the management of power plants, transmission networks, and other supporting infrastructure to ensure a stable and reliable electricity supply to meet the needs of customers throughout Indonesia.

V. Conclusion and Suggestions

Conclusion

During the internship activity, the author took the topic "The Role of Service Staff in Digitalization at PT. PLN (Persero)", it can be concluded that digitalization is a strategic step that can improve efficiency, quality, and ease of service to customers. In this process, the role of service staff is very important to connect customers with technology, as well as an implementation in the implementation of digital innovation.

The author also assists with various activities, such as helping to identify technicalities on customer applications, providing input for feature development, and socializing the use of digital services. This shows that every contribution, even if small, can have a significant impact in accelerating a company's digital transformation.

Through this experience, the author gained an understanding of the success of digitalization not only determined by the technology used but also by the readiness and ability of service staff to support the process. With good and appropriate collaboration between technology, human resources, and supporting systems, PT. PLN (Persero) will be able to realize more innovative and customer-friendly services.

Suggestion

Based on the experience during the internship, there are several suggestions that can support the sustainability of digital transformation in the company. First, PT. PLN (Persero) can increase training for service staff to better understand the digital technology applied, so that they can be more effective in helping customers and handling technical obstacles

Second, the development of customer application features needs to be carried out periodically by paying attention to input from end users to ensure that the application remains relevant and easy to use.

In addition, building a work culture that supports digital innovation is also very important. This can be done by encouraging collaboration between divisions and rewarding contributions that support the success of digitalization. With these steps, it is hoped that PT. PLN (Persero) can continue to improve the quality of service and strengthen its position as an innovative and customer-oriented energy company

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