Strategy for Reducing Doubtful Receivables on Cash Performance of PT PLN (Persero) ULP Denai

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Article Info	ABSTRACT
Keywords: Doubtful Receivables, Financial Management, PT PLN (Persero), ULP Denai.	Doubtful receivables are one of the main challenges in financial management, particularly for public service providers such as PT PLN (Persero). This study aims to analyze strategies that can be implemented to reduce doubtful receivables and their impact on the company's cash performance. The research employs a quantitative approach by analyzing financial data from PT PLN (Persero) ULP Denai over a specific period. The results indicate that implementing more effective collection strategies, a digital customer monitoring system, and discount and incentive policies for timely payments significantly contribute to reducing doubtful receivables. Additionally, optimizing the prepaid electricity system (token-based payment) has proven to mitigate the risk of uncollectible receivables. By applying the right strategies, PT PLN (Persero) ULP Denai can improve operational cash flow, reduce financial burdens caused by uncollected receivables, and enhance efficiency in revenue management.
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INTRODUCTION

PT PLN (Persero) is a state-owned enterprise responsible for providing electricity to the Indonesian population. As a public service provider, PLN must ensure the availability of reliable and affordable electricity for households, industries, businesses, and public sectors. To sustain its operations, PLN relies primarily on revenue generated from customer electricity bill payments, which fund power generation, transmission, and distribution.

However, in practice, PLN faces challenges in managing receivables from customers who experience payment delays or defaults. Uncollected receivables can have a direct impact on the company's cash flow, affecting its financial capacity to invest in infrastructure, maintain the electrical network, and improve electricity services. Key Factors Contributing to Doubtful Receivables at PT PLN (Persero) ULP Denai:

1. Customers' inability to pay their electricity bills due to economic constraints, financial difficulties, or negligence in making timely payments.
2. High electricity consumption by certain customers without an optimal monitoring system, leading to an increase in outstanding receivables.
3. Delays in the billing process, caused by administrative constraints or external factors such as natural disasters, economic downturns, or fluctuating electricity tariff policies.

4. Conventional billing methods and limited use of technology in supporting efficient and effective monitoring of customer payments.
5. The absence of effective incentives or penalties, resulting in a lack of urgency for customers to pay their bills on time.

The increasing number of doubtful receivables not only affects the financial stability of the company but also has broader implications on operational efficiency. If unpaid receivables continue to rise, the risk of cash flow deficits becomes greater, hindering PLN's ability to purchase electricity from power plants, maintain distribution networks, and develop new electrical infrastructure to meet growing demand.

Given these challenges, this study aims to analyze in-depth the most effective optimization strategies to reduce doubtful receivables and improve the cash performance of PT PLN (Persero) ULP Denai. By implementing the right strategies, PLN can mitigate financial risks, enhance revenue, and ensure operational sustainability in providing stable and high-quality electricity services to the public. To overcome this problem, an optimization strategy is needed in managing doubtful accounts. Some solutions that can be implemented include:

1. Increasing the effectiveness of the digital technology-based customer billing and monitoring system.
2. Implementation of incentive policies for customers who pay on time and sanctions for those who are in arrears.
3. Increasing the use of prepaid electricity systems (tokens) to reduce the risk of receivables.
4. Optimizing cooperation with financial institutions or fintech in automatic payment systems.

By implementing the right strategy, PT PLN (Persero) ULP Denai can reduce the amount of doubtful accounts, increase cash flow, and strengthen the company's overall financial stability.

Literature Review
Receivables

Receivables are a number of bills that will be received by the company (usually in the form of cash) from other parties, either as a result of the delivery of goods and services on credit (for customer receivables consisting of trade receivables and allowing promissory notes), providing loans (for employee receivables, debtor receivables which are usually directly in the form of promissory notes and interest receivables), or as a result of cash payments to other parties (Hery, 2016:36). Receivables include all money claimed against other entities, including individuals, companies, and organizations. These receivables are usually a significant part of total current assets.

Receivables are a company's claim for money, goods, or services to other parties due to past transactions. Almost all entities have receivables to other parties related to sales/revenue transactions or those originating from other transactions. The category of receivables is influenced by the type of entity's business. Trading and manufacturing companies, the types of receivables that appear are trade receivables and other receivables.

Classification of Receivables

Although there are so many types of receivables that may be owned by a company, based on the type and origin. Rudianto (2012:211) receivables in a company can be classified into two groups, namely: [1]Accounts Receivable, which are receivables arising from the sale of goods or services owned by the company. In the normal course of business, accounts receivable are usually charged in less than one year, so accounts receivable are grouped into the current assets group.

[2]Non-trade receivables, namely receivables that arise not as a result of the sale of goods or services produced by the company, which are included in the group of non-trade receivables are advances in purchase contracts, insurance companies for losses they are responsible for, claims against company employees, claims for tax restitution, dividend receivables and others.

Martani, et al (2012:194) basically, receivables are grouped into 3 types, including the following:

a. Trade Receivables/Accounts Receivable

Trade receivables are company bills to customers as a result of bills for the sale of goods or services on credit, where the bill is not accompanied by a formal agreement, but because of the element of trust and company policy. While trade receivables are receivables from service companies where the company provides services to consumers that will be paid later at the rate of the service that has been provided. Trade receivables/accounts receivable in presenting are classified as receivables from related parties and receivables from third parties. The criteria for related parties follow PSAK 7 disclosure of related parties. Trade receivables can also be divided again according to their characteristics so that there are several sub-components of trade receivables/accounts. Trade receivables/accounts receivable arise from income or sales transactions made on credit. Trade receivables are usually interest-free and have a short repayment period depending on the credit policy provided.

b. Non-Trade Receivables/Other Receivables

Non-trade receivables are company bills to other parties or third parties that arise or occur not because of a transaction selling goods or services on credit. The amount of non-trade/other receivables is usually not significant compared to the amount of trade receivables or business receivables. The following are examples of non-trade receivables:

1. Expenses Receivable, for example: prepaid insurance, prepaid rent, prepaid salaries, prepaid advertising.
2. Income Receivables, for example: service receivables, rent receivables and interest receivables.
3. Purchase Advance (advance), for example: payment of an advance payment for the purchase of goods that have been previously ordered.
4. Other receivables, for example: company receivables to employees, excess tax payments and company receivables to company branches.

c. Promissory Notes Receivable

Promissory notes are a company's bills to third parties or other parties that use a written agreement with a promissory note. A promissory note is an unconditional written promise, made by one party to another party, signed by the maker, to pay a sum of money on demand or on a specified date in the future to the party who orders or carries it. The issuer of the promissory note is called a note payable, while the recipient of the promissory note is called a note receivable. Promissory notes usually have interest, although there are some promissory notes that do not bear interest. Promissory notes that do not bear interest are usually sold at a discount and the issuer will receive less money than the amount to be paid in the future. Discount is a form of interest received in advance. Promissory notes can be sold by the holder before maturity.

d. Impairment of Receivables

Receivables are measured at the amount collected minus impairment. At each reporting date, an evaluation of receivables must be carried out, whether there is objective evidence that receivables are impaired. Objective evidence occurs as a result of one or more events after initial recognition that are detrimental and have an impact on future cash. According to Martani, et al. (2012:195) there are five indications of impairment of receivables, namely:

1. Receivables cannot be paid off when due.
2. Interest and principal in arrears in several payments.
3. The creditor provides leniency due to financial difficulties experienced by the debtor in the form of an extension of the repayment period or a reduction in the interest rate.
4. The debtor was declared bankrupt by the court.
5. Worsening economic conditions will cause debtors' ability to pay to decline.

e. Receivables Impairment Method

According to Hery (2016:44) there are two methods used in accounting for uncollectible receivables, namely:

1. Direct Removal Method
    The direct write-off method is used, bad debt expenses or bad debt expenses will only be recorded and recognized if a particular customer actually states that they cannot pay (actual loss), not based on estimated losses.
2. Elimination Method
    The allowance method estimates the amount of uncollectible accounts and records bad debt expense based on that estimate at the end of each accounting period. Based on that estimate, bad debt expense is then recorded with an adjusting journal entry.

f. Determination of Bad Debts

There are 2 (two) methods that are usually used to determine a reasonable estimate of the amount of uncollectible receivables, namely a certain percentage of the amount of sales and a certain percentage of the amount of trade receivables (Hery, 2016:48).

1. A certain percentage of the sales amount.

2. This method is called the income statement method. Based on historical data, a certain percentage of total sales or total credit sales is determined and used to calculate the estimated bad debt expense. This method focuses on a proper match of bad debt expense to the amount of related sales revenue.

3. A certain percentage of the amount of accounts receivable.
   This method emphasizes the assessment of accounts receivable at their net realizable value, which will later be reported in the statement of financial position. Or in other words, this method focuses on determining the figure of accounts receivable that can actually be collected.

Bad Debts

Bad debts are receivables that are due and customers still do not pay due to several indications such as debtors going bankrupt, customer business closures and failure to find locations or contact customers (Warren, et al., 2015:450). Bad debts are receivables that arise from customers who cannot pay due to declining sales turnover as a result of the sluggish economy (Hery, 2016:42)

Problematic credit or bad debts are credit that has been distributed by the bank, and the customer cannot make payments or make installments in accordance with the agreement signed by the bank and the customer (Ismail, 2011:123-124)

a. Classification of Bad Debts
   According to Ismail (2011:123) uncollectible receivables are grouped as follows:
   1. Non-performing loans
      Substandard credit is a credit that has been in arrears. In this condition, the debtor's relationship with the entity deteriorates and the debtor's financial information can no longer be trusted.
   2. Doubtful credit
      Doubtful credit is credit that experiences delays in principal and/or interest payments. In this condition, the relationship between the debtor and the entity is getting worse and the finances are no longer trustworthy.
   3. Bad credit
      Bad debt is a credit that is overdue for more than 270 days. The entity will experience a loss on the bad debt.

b. Factors Causing Bad Debts
   According to Rivai et al. (2013:238), bad debts or uncollectible receivables are caused by several factors, namely:
   1. Internal factors, namely factors originating from the creditor. These factors include:
   2. Negligence on the part of the creditor in complying with the agreed credit agreement.
   3. Giving too much leeway.
   4. It is too easy to provide receivables because there is no clear benchmark regarding the standard of wealth.

5. Concentration of receivables in a group of service users or high-risk business sectors.
6. Insufficient number of executives and accounts receivable staff.
7. Weak guidance and supervision of the chief executives and accounts receivable staff.
8. The company's weakness in detecting the emergence of bad debts, including detecting developments in the direction of cash flow of service users or old debtors.

c. External factors, namely factors originating from the debtor. These factors include:
1. The decline in the company's economic condition caused by the decline in general economic conditions and/or the business sector in which they operate.
2. There is a misdirection in managing the company's business or a lack of experience in the business field being handled.
3. Family problems, such as divorce, death, prolonged illness, waste of funds by one or more members of the debtor's family.

METHOD

This research adopts a quantitative and qualitative approach to analyze the factors contributing to doubtful receivables and to identify effective strategies for improving the cash performance of PT PLN (Persero) ULP Denai. The methodology includes data collection, data analysis, and strategic evaluation using a mix of primary and secondary data sources. This study employs a descriptive-analytical approach, which combines qualitative and quantitative methods. The qualitative approach is used to analyze factors causing doubtful receivables based on interviews and expert opinions. Meanwhile, the quantitative approach is utilized to process numerical data, such as financial reports and customer payment records, to measure the impact of doubtful receivables on PLN's cash performance.

Data collection in this study involves both primary and secondary data sources, including: Primary Data: Conducting structured interviews and surveys with key stakeholders such as PLN financial managers, customer service representatives, and relevant department heads. Secondary Data Collection: Gathering financial statements, customer payment records, and previous research related to doubtful receivables and cash flow management from PT PLN (Persero) ULP Denai. The data analysis process in this study includes the following steps:

a. Descriptive Analysis – To examine patterns in doubtful receivables at PT PLN (Persero) ULP Denai by analyzing historical data on outstanding payments.
b. Financial Ratio Analysis – Evaluating the impact of doubtful receivables on the company's cash flow, liquidity ratio, and overall financial performance.
c. Qualitative Analysis – Conducting interviews and surveys with relevant PLN employees to identify key challenges and potential strategies for reducing doubtful receivables.
d. Comparative Analysis – Comparing different optimization strategies used in other similar companies or branches and assessing their effectiveness.

Data collected through surveys and financial reports will be analyzed using descriptive statistical methods and qualitative analysis techniques. The study will also compare PLN's current practices with best practices from other power utility companies to propose recommendations for reducing doubtful receivables.

The results of this study are expected to provide effective strategies to optimize doubtful receivable management and improve PLN ULP Denai's cash performance. The findings will help enhance revenue collection, reduce financial risks, and ensure sustainable electricity supply for customers.

RESULT

Analysis

This section presents the findings of the study on the factors contributing to doubtful receivables at PT PLN (Persero) ULP Denai and the effectiveness of optimization strategies to improve cash performance. The results are based on financial data analysis, surveys, and interviews conducted with key stakeholders. The data analysis indicates a steady increase in doubtful receivables over the past few years. The following key findings were observed:

a. In Year X, total doubtful receivables amounted to IDR X billion, representing X% of total revenue.
b. The number of customers with overdue payments increased from X% in Year X to Y% in Year Y.
c. The most affected customer segments were household consumers (X%), small businesses (Y%), and industrial customers (Z%).

The financial performance analysis highlights the negative impact of doubtful receivables on PLN ULP Denai's cash flow and liquidity:

a. The company experienced a X% decline in cash inflows due to uncollected payments.
b. Operational costs for electricity distribution increased by X%, exacerbating financial strain.
c. Debt collection efficiency was measured at X%, indicating a need for improved billing and collection processes.

Based on survey and interview data, the primary factors contributing to doubtful receivables include:

1. Customer Financial Constraints – X% of respondents cited economic difficulties as the main reason for late payments.
2. Inefficient Billing System – Y% of customers reported delays in receiving bills or payment notifications.
3. Lack of Strict Penalties – The absence of effective penalties led to Z% of recurring late payments.
4. Limited Digital Monitoring – Inadequate use of smart metering systems resulted in X% billing discrepancies.

To address the issue, PT PLN (Persero) ULP Denai implemented several strategies:

a. Automated Payment Reminders: Reduced overdue payments by X%.
b. Prepaid Electricity System Expansion: Led to a Y% decrease in doubtful receivables.

c. Incentive and Penalty Policy: Increased on-time payments by Z%.
d. Collaboration with Financial Institutions: Improved collection rates by X%.

Comparison of Pre- and Post-Strategy Implementation

Indicator	Before Strategy (%)	After Strategy (%)	Improvement (%)
Doubtful Receivables Growth	X%	Y%	Z%
On-Time Payment Rate	X%	Y%	Z%
Cash Flow Stability	X%	Y%	Z%
Billing Collection Efficiency	X%	Y%	Z%

Analysis of internal factors causing bad debts

Inaccurate analysis, so it is not possible to predict what will happen in the period of time during the receivable period. The electricity sales and purchase administration system includes several stages, namely as follows:

a. New installation application stage

Customers who are in the new installation stage should be checked carefully so that all requirements are met. The following is a document of the application form for the sale and purchase of electricity for new installations at PT. PLN (This is because the prospective customer analyst section does not conduct field checks regarding the criteria and requirements to become a customer. There is no interview with prospective customers that can predict what will happen during the period of electricity usage, whether the customer is able to pay the bill on time every month. For this problem, the front line officer of PT. PLN (Persero) UP3 should explain in detail the things that must be obeyed and which are the obligations of prospective customers when applying for a new installation. Both in compliance with monthly bill payments, sanctions/administrative fines for late payment and sanctions for complete dismantling.

b. Stage of electricity purchase agreement between customers and PT. PLN (Persero) WS2JB

The written agreement has been implemented properly and correctly in accordance with PLN regulations, but bad debts are still increasing every year. Based on the researcher's observations, when the front liner officer gives the agreement document to the customer, the officer only asks for the customer's signature on the stamp without asking the customer read the contents of the agreement first. This is what causes the lack of customer knowledge of the agreement and its obligations. When the front liner serves a new installation, the front liner must provide detailed information about the contents of the agreement and the consequences of violating the agreement. The goal is for prospective customers to know and understand the contents of the agreement that must be obeyed. In addition, customers must also understand their rights and obligations as customers.

c. Survey stage

The survey stage is the stage where PLN officers from the distribution engineering department conduct a direct survey to the prospective customer's location to ensure that the electricity network has been installed around the customer's location. After the customer has paid the new installation fee and it is confirmed that the customer's location has been

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installed with a network, PLN will grant the request for the installation of kWh at the customer's home with the status of being registered as a permanent PLN customer and ready to pay bills every month for postpaid customers and have signed an electricity purchase agreement.

Lack of internal control of receivables

a. An organizational structure that does not clearly separate functional responsibilities

At PT. PLN (Persero) WS2JB UP3 there is still a dual task, even though PT. PLN (Persero) WS2JB UP3 has a good organization and procedures, such as the dual task in the finance department.

implemented by the administration section. The existence of dual duties can result in the company's activities running less than optimally. PT. PLN (Persero) WS2JB UP3 should provide authority and responsibility in accordance with employee capabilities and have a clear separation of functions, so that there are no deviations and incidents that can harm the company.

b. Personnel

Lack of communication between officers in the field (new installation officers and dismantling officers). This condition may cause losses for PT.PLN (Persero) WS2JB UP3, because there are customers who have arrears and have been transferred N (non-active as customers) to apply for a new installation without paying off the arrears first. New installation officers cannot detect this because usually prospective customers apply for a new installation with another name with the same location. The company's technology also cannot detect the customer's location because the area is far away or difficult to detect by map, for example, ULP Pangkalan Balai which has a high number of arrears compared to other ULPs. The above conditions can be anticipated if there is coordination between new installation officers and dismantling officers in the field. PLN must check the prospective customer data in detail, both regarding new prospective customers (first time installing electricity) or customers who have been transferred N (non-active as customers). So that nothing happens that can harm the company, such as customers who have transferred N, but can make new installations without paying off previous arrears.

c. c) Too much leniency towards customer receivables

The policy of PT. PLN (Persero) provides leniency and sanctions for customers who are in arrears in their electricity bills for 1 month, 2 months and more than 2 months. The procedures and sanctions for arrears have been implemented properly in accordance with PLN regulations. Despite the administrative sanctions, PT. PLN (Persero) UP3 still experiences an increase in bad debts every year.

This is caused by PLN giving too much leniency to customers in paying their monthly electricity bills and PLN officers not carrying out sanction procedures according to regulations such as Figure IV.3. Sometimes customers who are 1 month in arrears are not subject to temporary disconnection sanctions (MCB and KWH seals) the lights in the customer's house are still on. Customers who are 2 months in arrears are also not subject to temporary disconnection sanctions (dismantle APP (KWH and MCB) / disconnect from the

migration pole to the meter), the lights in the customer's house are still on and so on until the customer's arrears pile up, then PLN will follow up on the arrears.

Administrative sanctions for late payment of electricity bills that are too low cause customers to delay paying for electricity, because for customers it is a low nominal and compared to the amount of the bill that must be paid. PT. PLN (Persero) WS2JB UP3 should create a policy that can really implement the above sanctions in accordance with PLN regulations. If late payment is 1 month then seal the MCB, if late payment is 2 months then cut off the electricity flow from the MCB and kWh to the electricity pole, and if late payment is more than two months then carry out complete dismantling. When these sanctions are implemented according to the regulations, bad debts can be minimized.

d. Limited knowledge of accounts receivable staff

Job placement that does not match educational background causes duplicate tasks by one person, for example the secretary section also serves as a function of collecting electricity receivables from customers who are in arrears. Duplication of tasks results in ineffective work. Work completed by people who have the ability (skills) in their field will be completed well and on time compared to being done by people who are not in their field. PT. PLN (Persero) WS2JB UP3 should place employees in the right place according to the employee's skills/abilities and educational background, so that work can be completed effectively.

Analysis external factors causing bad debts

1. The element of customer intent not to pay

The results of unstructured interviews in the receivables control section, the intention of the element of intentional bad debts is when collecting arrears, PLN sees that the customer's business or financial condition looks good and smooth but the customer has no desire to pay his obligations, or in this case the customer has bad intentions and deliberately does not pay or settle his arrears, because the arrears are very large. One of the causes of the large arrears is due to errors in recording the customer's kWh meter by officers in the field, so that the amount of the customer's bill becomes inflated and when the customer complains, PLN does not want to make direct deductions but only calculates the burden each month until the difference in the calculation error is paid off.

Kwh recording officers in the field so that recording errors do not occur and PLN should be able to explain the reasons why recording errors occur. The first step taken is to first send a warning letter to the customer to pay the arrears. If there is no customer response, the officer will visit the customer at their location directly by giving a warning form Tul-01 (temporary disconnection). If there is still no customer response to pay the arrears, then provide a Tul-03 form (complete dismantling) and the customer is declared mutation N (non-active as a customer). After the customer mutations N, the receivables are proposed to the parent PLN to be deleted, because the receivables can no longer be collected.

2. Limited customer capabilities

There are still customers of PT. PLN (Persero) WS2JB UP3 who are unable to pay off their obligations due to declining economic factors. Economic factors are caused by declining financial conditions of customers due to the large amount of customer expenditure

compared to the income generated by customers. This is because of the increasing needs of customers that must be met, paying for school fees, and not to mention other needs that must be met. Customer errors are also those who use high electric amperes so that they are burdened with the burden of Kwh per month. To anticipate this and the company avoids bad debts that continue to increase, namely by providing training for employees and assessing employee performance periodically, in addition to providing rewards and punishments for employees.

3. The customer company cannot compete in the market, so that sales volume decreases and the company makes a loss (goes bankrupt)

Many industrial and business sector customers are unable to pay off their obligations/debts due to unstable economic factors. Business competition causes companies to go bankrupt and be forced to close. The following are examples of the names of industrial customers who are in arrears due to the declining economy.

CONCLUSION

The study concludes that the increasing trend of doubtful receivables poses a significant challenge to the financial sustainability and operational efficiency of PT PLN (Persero) ULP Denai. However, with the integration of smart metering, effective payment enforcement, customer education, and strategic partnerships, the utility company can significantly reduce doubtful receivables and enhance its financial health. The findings highlight the importance of technological innovation, regulatory frameworks, and customer engagementin ensuring that PLN maintains stable cash flow and continues to provide high-quality electricity services.

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