ANALYSIS OF COSO-BASED INTERNAL CONTROL SYSTEM OF UNCOLLECTIBLE RECEIVABLES  
(Case study PT. PLN ULP Rantepao)

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Abstract. Implementation of adjustments in the payment system from postpaid to prepaid for PT. PLN ULP Rantepao with the objective of reducing bad debts, but the accounts receivable report demonstrates an increase in bad debts over the last 3 years. The goal of this research is to examine the internal control system for bad debts in accordance with COSO. The descriptive qualitative method was used in this research. Using a random sampling technique, interviews, documentation, and observation were conducted. The sample used in this research is saturated. The significance of this research stems from the fact that bad debts have a significant impact on the company's financial health performance. (1) Changes to the prepayment system have no effect on the reduction in bad debts, according to the research results. (2) The internal control system at PT. PLN ULP Rantepao has not been properly implemented in terms of the 5 COSO components. Instances in which the risk assessment, control environment, and monitoring activities have been implemented, but only a few of each COSO component's items have been implemented. In the meantime, neither control activities nor information and communication have been properly implemented. (3) Control activity is relatively more influential in fostering the emergence of bad debts due to the low paying power and awareness of customers in meeting their obligations. This research will be more interesting if it is continued by investigating the failure factors of changing the prepaid payment system in an effort to reduce bad debts using a variety of research methods.

Keywords: Uncollectible Receivables, COSO, Internal controls.

INTRODUCTION  

The advantage of creating a system in every business is that it assists management in managing the business effectively and efficiently. Effective management is characterized by faster managerial decision-making, increased company competitiveness, reduced operational costs, and more efficient business processes. This operational efficiency gains and business process efficiency is what PT. PLN has achieved for
products sold to customers, specifically the transition from a postpaid to a prepaid system for new customers. However, postpaid payments are still utilized by older clients. PT. PLN ULP Rantepao has made modifications to its payment system, so bad debts should be easier to manage. According to preliminary research based on PT. PLN ULP Rantepao's financial statements, however, bad debts have increased over the last three years. Thus, the company's anticipated results were not realized as a result of the policy changes. Therefore, an analysis of PT. PLN ULP Rantepao's internal control based on COSO is required. The purpose of this research is to determine how PT. PLN ULP Rantepao has implemented COSO-based internal control over bad debts.

One of the goals of the new payment system is to reduce the number of customers who are delinquent on their payments (uncollectible accounts). However, research (Bugis & Management, 2020) tested the effect of policy changes in post-payment systems and examination fees on bad debts using the regression method, with results indicating that payment system changes have no effect on decreasing bad debts. These results are consistent with the theory conveyed by Hery (2016), which states that bad debts are not influenced by the payment system, but by other factors such as the inability of customers to pay and other factors. Bad debts have a significant impact on a company's poor financial health, which has a substantial impact on the company's profits. This is consistent with the research (Yusmalina et al., 2020) Bad debts have a significant impact on profits. According to (Munanendar et al., 2013), bad debts had a negative impact on profits. Similarly, as per (Permata Hati, 2018) and (Timuriana & Nasution, 2014). The results of this research show the significance of internal control in the management of bad debts in order to maximize profits and support the achievement of an organization's objectives. Among all the previous research employing the method of regression, the following is the most comprehensive. According to (Amri & Hendarsyah, 2017), bad debts are the result of an internal control system that has not been optimally implemented using a qualitative descriptive method with an inductive approach based on the risk associated with each prospective customer. In (Yani & Ade, 2019) analyzing the implementation procedure based on the function of each work unit, the results of the study indicate that the control of bad debts can be minimized if each work unit has carried out its respective responsibilities and functions in each work unit / division / department. Using descriptive quantitative methods and a work unit function approach, research (Yani
& Ade, 2019) is conducted. Similarly, research (Maya & Dewi, 2020) indicates that the proper application of procedures in each work unit will result in good internal control in an effort to minimize bad debts in accordance with the provisions of the financial report audit by Supriati, S.E., M.Sc., Ak., CA., CTA. In (Rachman, 2019), the receivables control system is analyzed in terms of Risk assessment (determining objectives, identifying and analyzing risks, assessing fraud risk, and identifying in policies and procedures) and Control Activities utilizing qualitative descriptive analysis techniques. According to (Widiasmara, 2014), the control of bad debts is analyzed using qualitative methods based on the ratio of receivable turnover, average collection period, and aging of accounts receivable.

**RESEARCH METHODS**

The descriptive quantitative research method will be utilized for this study. This study uses both primary and secondary data as its data sources. This study's population consists of PT. PLN (Persero) ULP Rantepao's financial statements and data on receivables. This study's sample consists of PT. PLN (Persero) ULP Rantepao's uncollectible receivables data. This research employs random sampling as its sampling technique. According to (Triyulianto et al., 2019), random sampling is a method of drawing from a population or universe in a way that gives each member of the population or universe an equal chance of being selected or taken. Observation, documentation, and interviews are the data collection methods employed in this study. For the purposes of this study's research objectives, there will be two phases of data analysis:

1. The total amount of bad debts is analyzed.
2. Analysis of the use of the internal control system in an effort to manage bad debts in accordance with the 17 internal control principles comprised of 5 components as outlined by COSO (na., 2013):
   a. Control environment:
      - passion and commitment to morality and integrity
      - implement ones supervisory duties
      - structure the chain of command and responsibility
      - commitment to proficiency
      - enhance accountability
RESULTS AND DISCUSSION

1. Analyzing the total amount of bad debts

PT. PLN ULP Raupao has the following total amount of bad debts:

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Customers</th>
<th>Amount of Arrears</th>
<th>Percentage of Uncollectible Accounts</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>88</td>
<td>150,228,519</td>
<td>5.8%</td>
</tr>
<tr>
<td>2020</td>
<td>118</td>
<td>154,497,380</td>
<td>7.1%</td>
</tr>
<tr>
<td>2021</td>
<td>109</td>
<td>153,955,127</td>
<td>7.6%</td>
</tr>
</tbody>
</table>

Source: processed data (2022)

According to the research (P, 2020), PT. PLN ULP Enrekang has handled bad debts well, taking into account that PT. PLN ULP Raupao is a parent organization.
of ULP Enrekang. However, the performance of receivables at PT. PLN ULP Rantepao has actually seen an increase in bad debts over the last 3 (three) years. With a total of 88 customers and Rp. 150,228,159 in arrears in 2019, there were a total of 118 customers in 2020. This represents an increase in the number of customers who are in arrears by 34% of all customers who did not fulfill their obligations, but the amount of the increase in bad debts was only 2.8% from the previous year. The value (in rupiah) of the increase in bad debts is therefore relatively low, falling below 5%, or 2.8%, despite the fact that the number of customers who default on their obligations is quite high. And in 2021, the number of customers in arrears will fall by 7.6%, which is equivalent to a 3.5% decline in the total value of receivables. However, if the presentation value is calculated using the percentage of bad debts based on the ratio of receivables to customers, it will show an increase from year to year, specifically 5.8% in 2019, 7.1% in 2020, and 7.6 in 2021. Thus, when comparing the rate of growth to the total amount of receivables from year to year, it reveals a fluctuating performance with an increase in customers without being accompanied by an increase in the total amount of (rupiah) bad debts.

The preceding explanation is a breakdown of the amount of bad debts incurred by PT. PLN ULP. Rantepao, it is necessary to conduct a follow-up analysis to measure the performance level of receivables control in controlling bad debts after determining the company's bad debt percentage. This measurement is based on the COSO-based measurement standard for internal control. The analysis of this application will be described in Section 2 of this document.

2. Analysis of the application of the internal control system to control bad debts in accordance with COSO's five subcomponents and seventeen principles of internal control (na., 2013):

Table 2

<table>
<thead>
<tr>
<th>No</th>
<th>5 Komponen Coso</th>
<th>Prosedur PT PLN</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Risk Assessment</td>
<td>Organizational System</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Defining goals</td>
<td>Customer service</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>Identify and evaluate threats</td>
<td>prepare and generate payment receipts</td>
<td>✗</td>
</tr>
<tr>
<td>Control Activities</td>
<td>Healthy Practices</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------</td>
<td>-------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Assess fraud risk</strong></td>
<td>On the provided form, record, create, and archive each request file in a systematic and organized manner.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identify in procedures and policies</td>
<td>maintain master customer file</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2</th>
<th>Control Activities</th>
<th>Healthy Practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop control measures</td>
<td>Customers who have not paid their electricity bills will be visited by a termination officer.</td>
<td></td>
</tr>
<tr>
<td>Gain general control over technology.</td>
<td>Every month on the 21st, customers who have not paid their electricity bill by the 20th will experience a temporary power cut (seal). This brief power outage coincides with the publication of a notice of temporary disconnection.</td>
<td></td>
</tr>
<tr>
<td>Detailing into and policy procedures</td>
<td>limiting the payment of electricity bills on the 20th of each month in order to keep track of customers' electricity bills</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3</th>
<th>Information dan Communication</th>
<th>Quality Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using relevant infoboxes</td>
<td>customers with information about the electricity sale and purchase agreement.</td>
<td></td>
</tr>
<tr>
<td>Effective internal communication</td>
<td>Provide guidance to customers so they understand the terms of the agreement.</td>
<td></td>
</tr>
<tr>
<td>Effective external communication</td>
<td>Inquiring about unclear terms in the agreement</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4</th>
<th>Control environment</th>
<th>Rules and policies are disseminated.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dedication to morality and integrity</td>
<td>Customers should be regularly informed of rules, policies, and technical guidelines.</td>
<td></td>
</tr>
<tr>
<td>Accomplish the supervisory duties</td>
<td>Identify service quality and service response of all employees to customers</td>
<td></td>
</tr>
<tr>
<td>Create the authority and responsibility structures.</td>
<td>Identify service quality and service response of all employees to customers</td>
<td></td>
</tr>
</tbody>
</table>
dedication to proficiency Service improvement based on customer satisfaction ❌

Encouraging accountability The Indonesian accounting standards must be followed in the financial statements. ✓

5 Monitoring Activities Evaluation of all activities

Continuous and separate evaluation Implementation of monitoring every period ✓

Identify any deficiencies and report them. Recognize issues and assess weaknesses to transform them into opportunities or strengths. ❌

Remarks: (✓) has been applied
(X) has not been applied

From the table, 2 based on the COSO component (na., 2013) as for the results of the analysis of internal control of PT. PLN ULP Rantepao is as follows:

1. Risk Assessment
   a) Determining Objectives (✓) constitutes the Risk Assessment component of the internal control principle (1). According to the findings of the study, PT. PLN ULP Rante-pao has effectively determined its objectives in terms of controlling bad debts through modifications to the payment system.
   b) With internal control principles that have not been put into practice (x) in the Risk Assessment component, specifically; (2) Recognize and assess risks, and apply internal control principles. (4) Identify the three principles of internal control in policies and procedures; (3) evaluate fraud risk and internal control principles; The three items that have not been properly implemented because the company should have been able to identify the risks that will arise in the future when a prospective customer requests a new installation. In the field application, as long as the prospective customer has the ability to pay for the new installation, the customer will receive service immediately, regardless of the customer's financial ability or the accuracy of the customer profile submitted to PT. PLN ULP Rantepao. However, the company is unable to accurately identify customers who request new installations, so the arrears continue to grow annually. In addition, the policy on electric power for new prospective customers makes it less likely
that they will be able to choose a relatively low power according to their needs and ability to pay, due to the limited power meter with a power range of 450-900 Volt; if a 450-900 power meter is not available, customers will be forced to use ≥ 1,300 volts and above. Consequently, PT. PLN must review its policies and procedures.

2. Control Activities

The principle of internal control on items is covered in the Control Activities component. Develop control activities, develop general control over technology, detailing into and policy procedures have not been implemented properly (X); this is related to a lack of coordination between financial divisions, particularly among employees working in the accounts receivable department. If the termination has not been carried out directly by field officers to customers who have not fulfilled their obligations to pay on the 21st and above in the current month, the maximum is applied. This frequently occurs as a result of the slow reporting of the emergence of bad debts to the field staff by the financial side. Customers also have the misconception that field officers are only responsible for cutting off electricity for those who have not paid their bills. Even though PT. PLN ULP Rantepao staff or employees should routinely conduct field monitoring to report on the state of the customer and the reason behind the bad debt. Additionally, it is necessary to evaluate the system's implementation as frequently as possible in order to gauge how well each division is performing at its job. Due to employee performance behaviors that need to be improved, the Control Activities component cannot be implemented properly.

3. Information dan Communication

The Information component of the COSO control principle consists of the following items: Use relevant information; Effective internal communication; and Effective external communication. None of these items have been properly implemented (X). When the communication control between the new installation officer and the completed unloading officer is still lacking, as is the case when customers with N (inactive) mutations apply for new installations, it is deemed irrelevant. And PLN's policy is that it gives too much leeway from existing procedures, causing customers to be too cavalier about the applicable sanctions.

4. Control environment
Components of the control environment included in the COSO control principles are a commitment to integrity and ethical values, Establishing authority and responsibility structures and promoting accountability during the implementation of an effective control system (√). However, in the COSO control principle, Commitment to Competence and Execution of Supervisory Responsibilities have not been properly implemented and implemented (X).

5. Monitoring Activities

Monitoring activities based on the COSO control principle on the item Continuous and separate evaluation have been properly implemented (√), and this monitoring activity provides a breath of fresh air to the internal control of PT. PLN by demonstrating that the system that has been formulated and determined has fully met the control standards and only requires the best implementation in order for all systems to operate efficiently. In theory, ongoing evaluation of bad debts internal control should generate a report that can serve as a source of information regarding any deficiencies in PT. PLN's services, but in practice, this has not been properly implemented. In light of this analysis, it was determined that the activity of evaluating and reporting any deficiencies had not been carried out appropriately (X).

Analysis of internal factors causing bad debts.

a. Risk assessment, lack of ability to predict events over the course of the receivables' term. The administrative process for buying and selling electricity consists of the following stages:

1. New install application stage

   Customers who are in the new installation stage should have all requirements checked carefully. The application form for the sale and purchase of electricity for new installations at PT. PLN ULP Rantepao is included in the document below. This is due to the fact that the analysis of potential customers does not consider the standards and prerequisites for becoming a client. The ability to predict what will occur during the time when electricity is used, whether the customer is able to pay on time while using electricity, and whether the customer is able to pay the bill each month is not tested during interviews with potential customers. However, because this risk assessment is not in place, the company
finds it challenging to anticipate and reduce the risk of default, which is the source of bad debts.

2. Survey stage

The distribution engineering division of PLN is tasked with conducting a direct survey to the location of the potential customer during the survey stage to ensure that the electricity network is installed around the customer's location. After the client has paid the new installation fee and it is determined that the client's location is already networked, PLN will grant the client's home kwh with the status of being a permanent PLN client who is prepared to sign a power purchase agreement and pay the bill each month for postpaid clients.

3. Element of intentionality the customer does not pay

According to structured interviews conducted in the field of receivables control regarding the intentional component of uncollectible accounts, when arrears are being collected, PLN observes that the customer's business or financial situation appears to be stable and favorable but the customer lacks the motivation to fulfill his obligations. Or, if the customer has bad intentions by ignoring the administrative sanctions of PLN in the form of a fine, the customer's estimate of the amount of the fine is relatively small compared to the value of the arrears.

4. Limited customer capabilities

There are still customers of PT. PLN (Persero) ULP Rantepao who are struggling to meet their financial obligations as a result of deteriorating economic conditions. The customer's financial situation is determined by the proportion of spending to income. This is due to the growing number of customers who require services, as well as paying schoolchildren, among other things. Customers who have a business or are unable to pay off their obligations because the business they are currently running is experiencing financial difficulties or is not running smoothly, resulting in the customer not being responsible for paying off his responsibilities.

b. Control Activitas

Lack of communication among field officers (new installation officers and dismantling officers completed). Because a customer has arrears and has transferred N (non-active as a customer), this condition allows for losses to PT. PLN ULP Rantepao if a new pair is proposed without first paying off the arrears.
Typically, the prospective customer submits a new installation with a different name for the same location, making it impossible for the new installation officer to detect. If the coordination between both the new installation officers and the unloading officers is completed in the field, this condition can be anticipated. PT. PLN must thoroughly examine the data of prospective customers, whether they are new customers (first time installing electricity) or customers with N mutations (non-active as customers). So that undesirable occurrences, such as customers who have transferred N but can still install new devices without paying off arrears, do not occur.

PT PLN (Persero) ULP Rantepao's policy is to offer concessions and sanctions to customers who are behind on their electricity bills for one month, two months, or more than two months. Procedures and sanctions for arrears have been properly implemented in accordance with PT. PLN ULP Rantepao regulations. Despite the administrative sanctions, PT. PLN ULP Rantepao's bad debts continue to rise year after year. This was caused by the PT. PLN giving customers too much leeway in paying monthly electricity bills, and the PT. PLN failing to carry out sanction procedures in accordance with applicable regulations.

c. Information dan Communication

The written agreement has been carried out legally and correctly in accordance with PT. PLN's provisions, but the number of bad debts continues to rise yearly. According to the researcher's observations, when the front-line officer handed the customer the agreement document, the officer only asked for the customer's signature on the seal without having them first read the agreement's terms. This is what leads to the customer's ignorance of the agreement and its obligations. When the front liner officer serves a new installer, the front liner officer is supposed to inform the new installer in detail about the contents of the agreement and the consequences if the agreement is violated. The goal is for prospective customers to be aware of and comprehend the terms of the agreement that must be followed. Customers must also understand their rights and responsibilities as customers.

d. Control environment

The origin of bad debts at PT. PLN ULP Rantepao is also impacted by changes in governmental policies and regulations. For instance, altering the basic
electricity tariff and ending customer subsidies. Customer dissatisfaction because the high price is out of line with the service provided by PLN, which is still regarded as being of low quality.

e. Monitoring Activities

Every period, separate and continuous evaluations have been conducted for monitoring, but the activities are only limited to whether the evaluation is conducted while evaluating and reporting any deficiencies. It has not been properly implemented to identify issues and assess weaknesses to be turned into opportunities or strengths.

Internal control weaknesses at PT. PLN ULP Rantepao were discovered as follows in accordance with the findings of the aforementioned discussion regarding "Coso-Based Analysis of Doubtful Accounts Control System at PT. PLN (Persero) ULP Rantepao" based on COSO theory based on 5 components:

1) Risk Assessment, PLN does not pay attention to the needs of new customers, so it cannot predict whether or not the prospective customer will be able to fulfill their responsibilities on a monthly basis.

2) Control Activities, a lack of communication control over field officers (new installation officers and completed dismantling officers), and a PLN that is too lenient to customers

3) Information and Communication, in which PLN failed to communicate with prospective customers about the electricity purchase agreement.

4) Where there are still a large number of PLN customers who do not fulfill their payment obligations, and where the financial condition of customers who are unable to fulfill their payment obligations, and where PLN does not really care about customer dissatisfaction where the high tariff is not commensurate with the quality of service provided by PLN.

5) Monitoring Activities, where evolution has occurred but the system's weaknesses and strengths have not been identified in order to improve the system and develop the business.

The researchers concluded the same results as (Amri & Hendarsyah, 2017) by testing using a different method, but the study's findings remain consistent, namely that internal control has an effect on the rise and fall of bad debts.
Furthermore, according to (P, 2020), control activities are the most important of the five COSO components that promote bad debts.

CONCLUSION

The conclusions in this study include:

1. Prepayment system modifications had no impact on the decline in bad debts.
2. PT. PLN ULP Rantepao has not properly implemented the internal control system in accordance with the five COSO components. Where some of the risk assessment, control environment, and monitoring activities have been put into place. As a result, communication, information, and control activities have not been properly implemented.
3. Due to customers' willingness to pay and awareness of their obligations, control activity is one of the five (five) COSO measurement factors on doubtful accounts at PT. PLN ULP that is relatively more dominant in encouraging the emergence of bad debts.

ACKNOWLEDGMENT

We extend our gratitude and admiration to the committee and reviewers of the 2022 International Conference on Economics and Business (ICEB), who made it possible for the authors to take part in this activity and who meticulously read the scholarly articles we wrote.

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Universitas Sanata Dharma.


