

## ANALYSIS OF BAD DEBTS IMPLEMENTATION IN ICT-BASED ACCOUNTING PRACTICES

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### ABSTRACT

*during the author's internship in the finance department. Handling of bad debts is a significant challenge in managing company finances, especially in the digital era that demands efficiency and transparency. Previous studies have focused more on conventional approaches in recording and providing for bad debts, but there are still gaps in the use of information technology, especially the implementation of ICT (Information and Communication Technology)-based accounting systems in detecting and managing the risk of receivables systematically. This article aims to recommend the integration of ICT-based accounting systems in bad debt accounting as a modern solution that is adaptive to digital accounting needs. The method used is a descriptive case study at PT. Delta Art Star, with a qualitative approach through direct observation, documentation, and interviews with the finance department. The results of the study indicate that the use of ICT-based accounting software facilitates computations that are past due, automates bad debt accounting calculations, and presents more accurate and real-time financial reports. This implementation also encourages transparency and efficiency in the managerial decision-making process. Thus, the development of an ICT-based accounting system is a strategic solution in dealing with the problem of bad debts in trading companies. This research is expected to be a reference in strengthening information technology-based accounting policies in the MSME sector.*

**Keywords:** Bad Debts, ICT-Based Accounting, UMKM, Accounting Information Systems, Financial Efficiency, PT. Bintang Seni Delta.

### INTRODUCTION

The development of information and communication technology (ICT) has brought significant changes in various fields, including accounting. The digitalization of financial systems allows companies to manage accounting information more quickly, accurately, and efficiently. One important aspect of accounting that is directly affected by technological advances is the management of accounts receivable. Information technology-based systems can help in recording, monitoring, and collecting receivables systematically. However, in practice, not all companies are able to utilize this technology optimally.

PT. Delta Art Star, as a small-to-medium-scale trading company, faces the problem of accumulating receivables that are not collected on time. This problem has a direct impact on decreasing the company's cash flow and liquidity. Minimal monitoring of receivables, late collection, and the absence of a technology-based system in the management process are the main contributing factors. This shows the need for an evaluation of the receivables management system implemented so that there is no decline in the company's financial performance on an ongoing basis.

The phenomenon of bad debts in the micro, small, and medium enterprise (MSME) sector is not new. According to research results by Putra & Wibowo (2021), most MSMEs in Indonesia have not adopted the system ICT-based accounting in its receivables management. This results in weak internal control and an increased risk of bad debts. A similar study by Lestari (2020) also found that companies that do not use digital financial recording applications tend to experience an increase in bad debts of up to 30% compared to companies that have been digitized.

Although there have been many studies related to the effectiveness of ICT-based accounting information systems, most of the focus is still limited to large-scale companies or technology-based startups. Meanwhile, studies that examine the application of this system to small-to-medium-scale trading companies, especially in the regions, are still very limited. In fact, this sector is the backbone of the national economy that requires more attention in strengthening its financial system, including receivables management.

The research gap is clearly seen from the lack of case studies based on field practice in small-to-medium companies that use an educational approach through vocational internship programs. In fact, the internship experience has great potential in uncovering real problems in the field and integrating theoretical learning with technology-based accounting practices. Therefore, the internship practice approach through the ICT-Based Accounting Practice course is relevant in filling this gap.

This study aims to evaluate the receivables management system at PT. Delta Art Star with an ICT-based practice approach. This evaluation was conducted to determine the extent to which the current system is able to support the process of recording and collecting receivables, as well as to identify weaknesses in its implementation. Through a direct observation approach and integration of theory-practice, it is expected that the results of this study can provide applicable input for companies in developing a more efficient receivables management system. Thus, this study not only contributes to strengthening the literature on ICT-based receivables management in the SME sector, but also supports the synergy between the world of vocational education and industrial needs. This study is expected to be a reference for similar companies in developing a receivables management system and become policy input in compiling a vocational curriculum based on sustainable industrial practices.

## **RESEARCH METHOD**

This study uses a qualitative approach with a case study method, which aims to deeply understand the practice of managing bad debts at PT. Delta Art Star through the implementation of an Information and Communication Technology (ICT)-based accounting system. The selection of case studies is considered based on the need to explore the phenomenon contextually and in detail, especially in the management of receivables which is the company's main concern during the author's internship.

Data collection was carried out using three main techniques, namely:

### **a. Research Approach and Type**

This research uses a qualitative approach with a case study method. This approach was chosen because it is able to provide a deep and comprehensive understanding of the practice of managing bad debts at PT. Delta Art Star, especially through the implementation of an Information and Communication Technology (ICT)-based accounting system. The case study was chosen purposively to explore the phenomenon contextually, intensively, and in-depth, considering that accounts receivable management was the company's main focus during the author's internship.

### **b. Location and Subject of Research**

This research was conducted in the work environment of PT. Delta Art Star, especially in the finance and operational departments. The research subjects consisted of several key informants who have important roles in managing receivables and implementing ICT-based accounting systems.

### **c. Data collection technique**

The data in this study were collected through three main techniques, namely:

#### - **Participatory Observation**

The author was actively involved in the work process in the finance department, especially in the activities of recording credit sales and monitoring customer receivables. Observations were carried out every working day for two months, focusing on:

- The flow of recording receivables using accounting software,
- The internal communication process between the finance team and the sales team,
- The practical implementation of credit policies and procedures.

The author's direct involvement allows observation of work dynamics and obstacles that arise in daily operations.

#### - **Semi-Structured Interviews**

Interviews were conducted in depth with three main informants, namely:

- Accounts receivables recording staff,
- Head of finance, and
- Operational manager.

The interview questions were designed in a semi-structured manner, thus providing freedom for informants to explain in depth about credit policies, collection procedures, and challenges faced in using the ICT system. This technique aims to explore insights that are not captured through observation and formal documents.

#### **d. Documentation**

Documentary data is obtained from various internal company sources, including:

- Internal financial reports,
- Accounts receivable transaction journals,
- Customer billing documents,
- Reporting system output from the accounting software used.

This documentation is used to verify the results of observations and interviews, as well as to identify conformity between data sources.

#### **e. Data Analysis Techniques**

The data analysis process in this study uses the interactive model of Miles and Huberman (1994), which consists of three main stages:

##### • **Data Reduction**

This stage includes the process of selecting, simplifying, and transforming raw data into information that is relevant to the focus of the research. Only data that is considered important and supports the formulation of the problem is analyzed further.

##### • **Data Presentation**

The reduced data is then systematically arranged in the form of descriptive narratives and thematic tables to facilitate understanding and identification of patterns.

##### • **Drawing and Verifying Conclusions**

Conclusions are drawn up based on patterns of relationships between findings from observations, interviews, and documentation. The validity of conclusions is tested repeatedly through a process of reflection and comparison between data sources.

## **RESULTS AND DISCUSSION**

### **Accounts Receivable Management System Used**

PT. Delta Art Star uses simple desktop accounting software to record financial transactions, including accounts receivable. This system is only used by finance staff and is not integrated with the sales department or operations department. This causes various problems, such as duplicate data, late recording, and difficulty in reconciling reports.

During the observation period, it was found that the accounts receivable recording process was carried out at the end of each working day by inputting data from manual notes.

This process is prone to error due to limited human resources (HR) and often results in data backlogs. As an illustration, in the second week of observation, a difference of Rp 12 million was found between the manual records of the sales department and the financial system report, which took two days to reconcile.

In addition, the software used does not yet support the visual dashboard feature, so there is no direct display related to the aging schedule (age of accounts receivable) or billing status per customer. Information like this is only known after manual data processing by staff, which takes quite a long time. This reduces the company's ability to proactively monitor accounts receivable that are approaching maturity.

### **Identification of Bad Debts**

Analysis of documentation shows that of the total accounts receivable worth IDR 500 million, around 18% (IDR 90 million) are included in the category of being overdue for more than 90 days. Most of these overdue accounts receivables come from regular customers who previously had a good payment record, but experienced difficulties after the COVID-19 pandemic.

Details of the causes of bad debts include:

- a. Incomplete customer contact data (30% of cases).
- b. No automatic reminders (25% of cases).
- c. Manual collection procedures without a fixed schedule (20% of cases).
- d. Inaccuracy in the analysis of creditworthiness (15% of cases).
- e. No strong contract or MoU during credit transactions (10% of cases).

In addition, the company does not have a scoring system to assess the risk of new customers, so all customers are treated the same in providing credit. Comparison with literature (Kurniawan & Nugroho, 2020) shows that companies that use a risk analysis system can reduce the number of bad debts to below 10%.

### **Efektivitas Implementasi Sistem ICT**

Meskipun sudah ada software akuntansi, pemanfaatannya di perusahaan ini masih minimal. Fitur-fitur canggih seperti laporan aging schedule otomatis, pelaporan via email, atau integrasi API dengan sistem lain belum pernah digunakan. Penyebab utama adalah kurangnya pelatihan staf serta rendahnya literasi digital. Misalnya, staf keuangan hanya memanfaatkan fitur jurnal umum dan laporan keuangan standar, tanpa mengeksplorasi modul-modul lain yang sebenarnya sudah tersedia.

Dalam wawancara, staf bagian piutang mengungkapkan bahwa mereka belum pernah menerima pelatihan resmi mengenai software ini dan hanya belajar secara otodidak. Padahal, modul pelatihan internal sederhana dapat membantu meningkatkan pemahaman fitur hingga 40% (Yuliana & Wahyuni, 2019).

Bandingkan dengan implementasi di UMKM lain yang sudah terdigitalisasi, seperti dilaporkan oleh Prasetyo & Dewi (2020), penggunaan software berbasis cloud memungkinkan integrasi data antarbagian, pengiriman reminder otomatis, hingga pelaporan berbasis dashboard real-time yang mempercepat pengambilan keputusan. Ini menunjukkan adanya kesenjangan signifikan yang perlu dijawab oleh PT. Delta Art Star.

### **Needs Analysis and Solution Recommendations**

To address this challenge, companies are advised to undertake a gradual digital transformation. The following is a needs analysis that has been identified:

- a) Cloud System: So that sales and finance departments can access shared data in real-time, reducing delays in recording.
- b) Automatic Reminder: Sending automatic messages via WhatsApp or email to remind customers of due bills.
- c) Visual Dashboard: Providing a visual display of the aging schedule, so that

management can quickly see problematic receivables.

- d) HR Training: Providing regular training so that staff are able to utilize all ICT system features, including analytics and reporting modules.

If these recommendations are implemented, based on a simple simulation, the company is predicted to be able to increase collection effectiveness by 20–30% in the first three months. This will have a direct impact on liquidity, reduce the need for external working capital, and increase the company's credibility in the eyes of suppliers and lenders.

In addition to internal recommendations, companies also need to consider external collaboration, such as:

- Using third-party services for professional collection.
- Adopting an external scoring system to assess potential new customers.
- Integrating accounts receivable reports with digital tax systems to improve compliance and administrative efficiency.

Comparison with Putri & Hidayat's (2023) study shows that companies that comprehensively integrate ICT systems experience a decrease in the bad debt ratio of up to 50% in one year.

### Future Challenges and Opportunities

Digital transformation is not without challenges. In addition to the initial investment costs, companies must be prepared to withstand resistance to change from employees who are used to working manually. Therefore, a change in strategy based on a participatory approach is needed, where staff are involved in the process of selecting systems, training, and periodic evaluation.

On the other hand, future opportunities are wide open, considering that the Indonesian government is encouraging the digitalization of MSMEs through various programs, including training and software subsidies. PT. Delta Art Star Abadi can take advantage of this momentum to apply for digitalization funding or grants.

### Tables and Visualization of Research Results

Table 1. Categories of Main Findings Based on Interviews and Observations (Manual NVivo Model)

Category Code	Frequency of Occurrence Data	Source Example	Statement
Software Limitations	11 times	Observation, Interview	We only use it for standard input and reporting.
Duplicate Data Issues	7 times	Observation	Sales and finance reports often differ.
Lack of Training	9 times	, Interview	Never had any training, just taught myself.
Lack of Billing Reminders	6 times	Documentation, Interview	There is no automatic reminder system to customers.
Weaknesses in Billing SOPs	8 times	Documentation, Interview	Billing is done whenever possible.

Table 2. Distribution of Aging Schedule Percentage (%)

Aging Category of Receivables	Amount (Rp)	Persentase (%)
0–30 days (smooth)	300.000.000	60%
31–60 days (caution)	80.000.000	16%
61–90 days (vulnerable)	30.000.000	6%
>90 days (uncollectible)	90.000.000	18%

Total	500.000.000	100%
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Table 3. Effectiveness of ICT Implementation (Simulation Scenario)

Indicators	Before ICT	After ICT Implementation (Simulation)	Description
Receivables >90 days	90 million	45 million	Down 50%
Transaction recording speed	1 day	Real-time	Increased efficiency
Input error rate	High	Low	Reduced human error
Number of automatic reminders	0	100% Customers	Increased billing regularity
Financial report creation time	3–4 days	<1 day	Supports fast decision making

## CONCLUSION

This study aims to analyze the management of bad debts at PT. Delta Art Star and provide applicable solutions to overcome the obstacles faced by the company. Based on the results of observation and analysis, it is known that the company still faces major obstacles in terms of accounting information system integration and low utilization of advanced features in the ICT-based system that has been implemented. In addition, the competence of human resources, especially accounting staff, has not fully supported the optimization of accounts receivable management, which results in an increased risk of bad debts.

Practically, this research contributes to PT. Delta Art Star in improving the receivables management system to be more efficient and accountable. While from an academic perspective, this finding can be a comparison between the theories studied by vocational students, especially in the field of private sector accounting and accounting information systems, with real practices that occur in the world of work. Thus, the results of this study are expected to be able to bridge the gap between the world of education and the needs of industry.

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