Indonesian Vocational Research Journal
ISSN 2828-5719, E-ISSN 2829-1883
Vol. 4, No.2; 2025
Published by Vocation and Certification Unit of UMG

Analysis of Accounting Information Systems on the Effectiveness of Receivables

Eriekah Eyzariyah[1], Nyimas Wardatul Afiqoh[2]
University of Muhammadiyah Gresik
Jl. Sumatera 101, GKB Gresik
eriekaheyzariyahh@gmail,com[1], afiqohnyimas@umg.ac.id[2]

Received: June 22, 2025 Accepted: June 25, 2025 Published: June 30, 2025

Abstract

This study aims to analyze the role of accounting information systems on the effectiveness of accounts receivable collection at PT. X. The background of this research is based on the importance of the accounting information system in supporting the smooth billing process, especially in companies that implement a credit sales system. Even though the company has used an integrated system in managing receivables, there are still various obstacles such as data mismatches when making invoices, incomplete supporting documents, and late payments from customers. This research uses a descriptive qualitative approach with data collection techniques through observation, interviews, and documentation. The results showed that the accounting information system implemented has helped speed up the recording process, improve data accuracy, and facilitate the process of monitoring and collecting receivables. However, the effectiveness of the system is not optimal because there are still input errors and weak document control. Therefore, the company needs to improve internal control and ensure the completeness and accuracy of data so that the accounting information system can function optimally in supporting the effectiveness of accounts receivable management.

Keywords: Accounting Information System; Accounts Receivable

1.Introduction

PT. X is the first company in Indonesia to produce ready-to-use instant mortar (premixed mortar) based on selected sand, the best quality cement, premium fillers (fillers) and additives (European additives that are homogeneously mixed with the right composition and processed using modern technology from Germany, resulting in high quality and consistent instant cement products) under the Mortar Utama brand. PT. X implements a credit sales system to provide convenience for customers in obtaining quality products without having to pay in advance, thus encouraging sales growth and strengthening business relationships.

A credit sales system is a sale made with the receipt of payment made at a later date within a certain predetermined period of time. The implementation of a credit sales system is carried out to provide convenience for customers in obtaining quality products without having to pay in advance, thereby encouraging sales growth and strengthening business relationships. (Prastyaningtyas, 2019)

When a company makes credit sales, it will automatically appear as receivables. This happens because after the goods ordered by the customer have been delivered, the receivable for the sale must be recorded through the accounting information system as a valid financial transaction. Then the customer is expected to pay this receivable at maturity in accordance with the agreement made by both parties. For this reason, companies that implement a credit sales system must have a good and organized sales accounting information system. This system is used to ensure that all receivables are managed properly, in order to support the smooth and efficient operations of the company as a whole so that it can be ensured that no errors occur. (Sinta & Sundari, 2024)

To ensure effectiveness and efficiency in the accounts receivable collection process, it is very important to use an accounting information system as an evaluation tool where the system not only functions to record financial transactions, but also to provide accurate and timely information regarding the status of accounts receivable. With an integrated system, PT. X can monitor unpaid receivables, identify risky customers, and analyze payment patterns. This is very important to reduce the risk of bad debts and ensure the company's cash flow remains healthy.

But the billing process to customers usually does not always run smoothly, sometimes there are times when the company experiences several obstacles that can hinder the billing process. The obstacles that are often experienced by PT. X when making or issuing invoices and billing such as incomplete document attachments so that the billing process through this invoice can be delayed, revisions when invoices have been sent to customers, and often customers pay their debts beyond the specified payment deadline. This is in accordance with research (Jitmau et al., 2021) which shows that constraints on late payment of customer receivables interfere with the effectiveness of the accounting information system for customer receivable collection procedures. Research (Salamah & Nurjaman, 2023) also shows that recording and typing errors when making invoices make accounts receivable collection procedures ineffective and inefficient. Research by (Rosyada, 2023) also revealed that the non-integrated accounting information system causes a lack of control over customer data that has not made payments, so that the collection of receivables is not optimal. A similar issue was found in a study by (Noorusyiam et al., 2024) which shows that the use of a manual system in the accounts receivable collection process has an impact on the delay and inefficiency of the collection procedure. Meanwhile, (Rahman et al., 2019) confirms that the implementation of an appropriate and structured accounting information system supports increasing the effectiveness of accounts receivable collection and accelerating the company's cash receipt process.

Through the analysis of the accounting information system on the effectiveness of accounts receivable collection, this article aims to explore how PT. X can utilize the Accounting Information System to improve the effectiveness of managing accounts receivable, collecting accounts receivable, and converting accounts receivable into cash so that it is hoped that the company can minimize the risk of bad debts, and ultimately improve overall financial performance.

Based on the explanation above, the authors are interested in conducting research with the title “Analysis of Accounting Information Systems on the Effectiveness of Receivables”.

Credit Sales System

A credit sales system is a transaction method in which goods or services are delivered to customers with payment made at a later date, according to a predetermined agreement. In this system, the company creates receivables to customers upon delivery of goods, which allows the company to increase sales volume. Credit sales can be made through several ways, including the use of company credit cards, where customers can purchase goods using a card issued by a particular company.

A credit sales system is a sales activity consisting of sales transactions of goods or services, either on credit or in cash. In a credit sales transaction, if an order from a customer has been fulfilled with the delivery of goods or delivery of services, for a certain period of time the company has a receivable to its customer. This credit sales activity is handled by the company through a credit sales system (Mulyadi, 2016). Meanwhile, (Romney & Steinbart, 2018) explains that the credit sales system is an integral part of the company's accounting system that manages the entire credit sales cycle, from credit authorization, invoicing, to payment reconciliation.

Accounts Receivable

Accounts Receivable are short-term financial claims arising from the sale of goods or services on credit to customers, which are expected to be converted into cash within one year or the company's normal operating cycle (Kieso et al., 2020). The receivable will be recorded as a debit in the accounts receivable account which is expected to be collected in the near future, for example 30 or 60 days. (Warren et al., 2019)

Accounts Receivable Management

The effectiveness of accounts receivable management is reflected in the speed of accounts receivable turnover and the minimal amount of doubtful accounts. Harahap states that good accounts receivable management must be supported by an accounting information system that is able to provide real-time and accurate accounts receivable data (Harahap, 2021). The main objectives of accounts receivable management in the context of corporate financial management are to maintain smooth cash flow, reduce potential losses due to uncollectible accounts, and ensure that the credit policy applied does not cause disruption to the company's financial stability. Receivables that have been recorded are then monitored regularly through an aging schedule analysis, in order to identify receivables that are approaching or past due.

Accounts Receivable Collection Procedure

One of the most important functions in sales accounting information is the shipping function which acts as a shipper of goods from the warehouse to be delivered to customers. However, companies that sell on credit will give additional duties to shipping staff, namely as receivables collectors. The billing function is to create a sales invoice and then send it to the customer. (Mulyadi, 2016)

Mulyadi (2016:411) Presenting the receivables collection procedure is as follows:

1. The accounts receivable department provides a list of receivables that are due for collection to the collection department.
2. The Billing Department sends collectors, who are company employees, to collect debtors.
3. The Collection Department receives a check in the name and remittance advice from the debtor.
4. The Collection Department hands over the check to the cashier.
5. The Billing Department submits the notification letter to the accounts receivable department for posting to the accounts receivable card.

6. The kasa department sends receipts as a sign of cash receipt to the debtor.
7. The Kasa department deposits the check at the bank, after the check is endorsed by the authorized official.
8. The company bank clears the check to the debtor's bank.

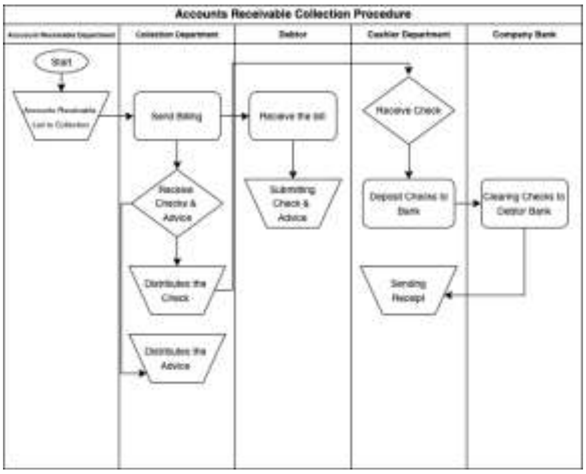

Figure 1. Accounts Receivable Collection Procedure

Accounts Receivable Conversion

Accounts receivable conversion not only talks about the timing of collection, but also the quality of receivables. He emphasized the need for a reserve for receivable losses in anticipation if the conversion process fails (for example, uncollectible receivables), so that the financial statements still describe a reasonable financial condition (Baridwan, 2021) It is important for companies to establish a reserve for receivable losses as a form of prudence in accounting. This reserve serves as a buffer against possible losses due to uncollectible receivables, which can be caused by defaults from debtors, administrative errors, or inaccurate credit scoring. With this reserve, the financial statements will still present reliable and fair information, as it realistically reflects the potential risks.

2.Method

The method used in this research is a qualitative research method that is descriptive and tends to use analysis. Qualitative research is research intended to understand certain phenomena. This phenomenon can be something experienced by the research subject such as behavior, perception, motivation, action and so on which is holistically described in the form of words that describe the conditions as they are. (Fiantika et al., 2022). This research was conducted at PT. X which is located at Jl. KIG Raya Utara Blok M/1 Gresik with the object of research, namely the accounts receivable collection system with invoicing at PT. X. In this study, researchers used data collection techniques in the form of direct observation, interviews, and documentation.

3. Result and Discussion

PT. X is the first company in Indonesia to produce instant premixed mortar under the Mortar Utama brand. In 2008, PT. X opened its second factory in Kawasan Industri Gresik (KIG), Surabaya. Business expansion began in 2017 with the opening of the third plant in Medan Industrial Estate and the fourth plant in Cikande, Banten, followed by the fifth plant in Semarang, Central Java in 2019.

PT. X is the first instant cement producer in Indonesia that has and continues to strive to meet the criteria for products that are environmentally friendly, high quality and have various advantages that other products do not have. In addition to low maintenance costs, PT. X products are also able to reduce the use of cement and water, thus saving resources and being more environmentally friendly. As the first instant mortar manufacturer in Indonesia, PT. X presents Job Automation Service which is an environmentally friendly technology because it is able to reduce packaging waste and air pollution, save energy, save water usage, save construction costs and be more efficient in storing building materials.

The sales system at PT. X is designed to support various transaction methods, including cash sales and sales on credit. In the context of credit sales, the company implements strict procedures to ensure that each transaction is carried out with careful consideration of risk. Credit sales is a strategy used by the company to increase sales volume and expand market share. However, this strategy also contains the risk of bad debts, so an effective internal control system is needed. A good internal control system can help companies minimize risks arising from credit sales, such as late payments and other irregularities. (Chandra & Jusuf, 2023)

The credit sales process begins with an evaluation of the customer's creditworthiness. This evaluation includes an analysis of the customer's credit history, financial capacity and reputation. One of the commonly used methods in assessing creditworthiness is the 5C principle, namely Character (character or moral track record), Capacity (ability to pay), Capital

(capital owned), Collateral (guarantee), and Conditions (economic or industry conditions). The application of this principle can increase the effectiveness of lending and minimize the risk of bad debts. (Lesawati et al., 2019) If the customer meets the criteria set, the company gives approval to make a purchase on credit, which is then followed by ordering goods as needed.

Once an order is received, the company will prepare and deliver the goods to the customer. This shipment is usually accompanied by supporting documents such as a road letter or delivery order as proof that the goods have been sent in accordance with the request. The next stage is the issuance of invoices, which are official documents that serve as bills to customers for sales transactions made. A sales invoice is a document that contains information about the goods or services sold, the price, and payment terms. This invoice is important for accounting purposes and as a tool to collect payment from the buyer. (Kasmir, 2019). Invoice is a proof of transaction that contains the date the transaction occurred, the names of the parties involved, the total value of the transaction, and other relevant information. Sales invoice is a credit sales invoice that shows the date of sale, the name of the customer, the total sales price, and other relevant information. (Weygandt et al., 2019).

After the invoice is issued, this document is sent to the customer through an agreed medium, either in physical or digital form. Sending invoices is an important stage in the sales administration process because it will determine when the payment period (terms of payment) starts running. Generally, companies set a payment period (for example, 15 days, 30 days, or 60 days) that is adjusted to the initial agreement between the seller and the buyer. The clarity of information in the invoice is crucial to avoid errors in payment or disputes at a later date. In addition, the existence of invoices is the main reference in managing receivables and recording transactions in the company's accounting information system. From the results of interviews with one of the finance staff said:

> "Yes, the company routinely analyzes the age of receivables, the analysis of the age of receivables is usually carried out at the beginning of each month. Through the system we use, we can see the age of receivables from each customer, so that we can find out which invoices are old enough. By routinely analyzing the age of receivables, we can evaluate the quality of receivables, identify which ones are classified as current and which ones are starting to go bad, and determine the most appropriate collection strategy. This analysis also helps the company to be more proactive in managing the risk of default."

The invoice process must follow standard procedures to be effective in supporting the company's internal control. This procedure includes several stages that are systematic and integrated, starting from invoice generation, data validation, sending to customers, recording in the financial system, to monitoring payments and collecting receivables if necessary. (Salamah & Nurjaman, 2023).

Procedure and Flow of Invoice Generation

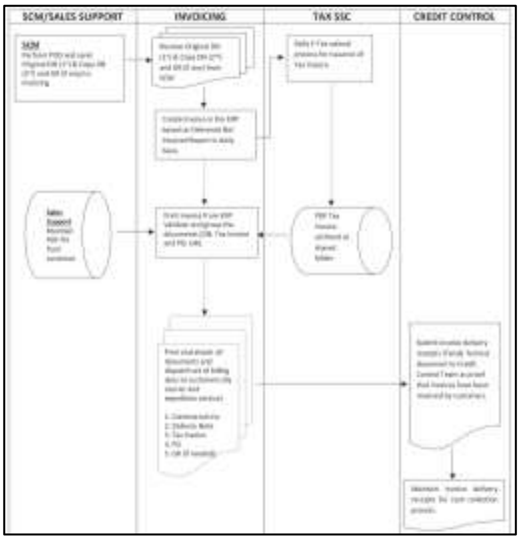

Figure 2. Procedures and Flow of Invoice Generation

Based on the Standard Invoice Flow Process flowchart at PT. X, the invoice generation process starts from the Supply Chain Management (SCM) section which carries out the Proof of Delivery (POD) process. After the process is complete, SCM sends the original delivery note document, a copy, and a receipt to the billing department. In parallel, the sales department is tasked with supporting and maintaining an archive of Purchase Orders (PO) from customers in digital format (PDF). After receiving the documents from SCM, the billing department then creates an invoice in the ERP system, based on the unbilled daily delivery report data. This process is followed by invoice printing from the system, which is then validated and grouped with other supporting documents, such as Purchase Orders, Delivery Note, Tax Documents, and Good Receipts. After that, the tax department uploads the daily e-Faktur and creates a tax invoice accordingly. The completed documents will be forwarded to the credit control department, which is responsible for receiving and storing invoice receipts as proof that the customer has received the document, as well as being the basis for the billing process.

Based on the results of the analysis, the accounting information system implemented by PT. X has made a significant contribution in supporting the effectiveness of accounts receivable management. The process of recording and managing receivables is faster and more accurate thanks to an integrated system. This has a positive impact on the speed of the billing cycle, improves the company's cash flow, and reduces the possibility of bad debts. In accordance with the view of (Gelinas et al., 2018) Information technology-based accounting information systems allow for more efficient transaction processes and better control of relevant financial information. As explained by one of the interviewees:

> "The system in our company is very helpful in monitoring receivables. Through this system, we can see receivable data in real-time, such as customer names, receivable amounts, due dates, and payment histories. So the monitoring and analysis process can be done more quickly and accurately. In addition, the system also has an automatic notification feature that will alert us if there are receivables that are close to or even past due, so we can take immediate action. That really helps reduce the risk of recording errors or missing data."

However, there are a number of obstacles that hinder the effectiveness of the system, mainly related to data mismatches during invoice generation, such as price mismatches with customer POs. These errors often result in document revisions and tax invoice cancellations, which in turn slows down the billing process. In addition, the lack of complete documents required for the billing process, such as road letters and Berita Acara Penerimaan Barang (BAPB), is also a factor that causes the billing process to be delayed. Document completeness and data accuracy are very important in accelerating the billing process, where incomplete documents can hinder the verification and validation process of billing by the customer. A finance staff explained:

> “Yes, the billing process at company X is done through two methods, namely digitally and manually. Digital billing is done using an e-invoice system, where invoices are sent to customers via email or an integrated information system platform. This method enables the delivery of billing documents quickly and efficiently, and facilitates the tracking of invoice status. Meanwhile, for certain customers or under certain conditions, the company also still does manual billing. In this method, company staff deliver physical billing documents directly to the customer. When handing over the document, the staff will also ask for proof of receipt of the invoice, which will later be used as an archive as proof that the billing has been done. The combination of these two methods is used so that the billing process remains flexible and can adjust to the characteristics of each customer.”

The completeness of supporting documents is a fundamental aspect in the receivables submission process because it acts as formal legal evidence of the transactions carried out. The validity of the output in the accounting information system is highly dependent on the accuracy of the input data; if the input process is not controlled, the information generated will be unreliable.(Hall, 2020).

Another obstacle is customer indiscipline in complying with the agreed payment deadline. Even though a credit period has been set, customers often pay beyond the specified time limit, thus hampering the company's cash flow. Without strict credit control and regular monitoring, the company will find it difficult to maintain liquidity. Information technology support is crucial in this regard, as explained by the finance staff:

> "Information technology has a very important role in supporting the real-time receivables conversion process. Through the use of digital financial dashboards, companies can monitor the latest status of each invoice directly and in an integrated manner. Information technology also provides an automatic notification feature for receivables that are close to or past due, making it easier for the finance team to take timely collection steps. In addition, receivable aging reports can be accessed instantly, which greatly assists management in evaluating receivables and determining effective disbursement strategies. With this digitalization, the conversion process from credit sales to cash can run faster and more efficiently, so that the company's cash flow remains optimal and under control."

The effectiveness of receivables management depends not only on the information system used, but also on the synergy between the departments involved, such as sales, billing, tax, and credit control. Each stage, from invoice issuance to payment monitoring, must run in a coordinated manner to avoid delays in the receivables disbursement process. The use of technology such as ERP and financial dashboards has been proven to improve information accuracy and transparency, but the success of the system is also determined by consistency in data input and discipline in carrying out standard operating procedures. Therefore, improving effectiveness can not only be achieved through technology modernization, but also through human resource training, enforcement of internal procedures, and periodic evaluation of the credit policies applied. This strategy is important so that the conversion of receivables to cash can run optimally and support the stability of the company's liquidity.

4. Conclusion

PT X, as a pioneer of instant mortar manufacturer in Indonesia, has successfully built an effective receivables management system through the implementation of an integrated accounting information system and strict internal control procedures. The credit sales process implemented, from evaluating customer eligibility to monitoring payments, has been systematically run with the support of technology such as ERP and digital financial dashboards, so as to accelerate the collection cycle, improve cash flow, and minimize the risk of bad debts.

Routine ageing analysis of receivables, as well as automatic notification features in the system, allow companies to proactively manage the risk of default and take timely collection actions. However, the effectiveness of this system still faces several obstacles, such as data mismatches during invoice generation, suboptimal completeness of supporting documents, and customer indiscipline in fulfilling payment obligations according to the agreed time. These problems can slow down the billing process and impact the company's liquidity.

Success in the management of receivables at PT X is not solely determined by the utilization of sophisticated technology, but is also supported by effective coordination between work units, discipline in implementing procedures, and consistency in data entry. Therefore, in addition to modernizing information systems, it is necessary to improve the competence of human resources through continuous training, consistent enforcement of standard operating procedures, and periodic evaluation of credit policies. These efforts aim to ensure that the process of converting receivables into cash can take place optimally and contribute to the company's financial stability.

5. References

Baridwan, Z. (2021). *Intermediate Accounting* (Edisi 9). Yogyakarta : UPP STIM YKPN, 2021.

Chandra, F., & Jusuf, A. A. A. (2023). Analisis Sistem Pengendalian Internal Atas Penjualan Kredit Pada Ud. Surya Agung Di Surabaya. *Journal of Innovation Research and Knowledge, 3(3), 555-564.*

Fiantika, F. R., Wasil, M., Jumiyati, S. R. I., Honesti, L., Wahyuni, S. R. I., Mouw, E., Mashudi, I., Hasanah, N. U. R., Maharani, A., & Ambarwati, K. (2022). Metodologi penelitian kualitatif. *Metodologi Penelitian Kualitatif. In Rake Sarasin (Issue March). Surabaya: PT. Pustaka Pelajar. Https://Scholar. Google. Com/Citations*.

Gelinas, U. J., Dull, R. B., & Wheeler, P. R. (2018). *Accounting Information System*. Cengage AU.

Hall, J. A. (2020). *Accounting information systems* (9th ed.). Cengage Learning.

Harahap, S. S. (2021). *Analisis Kritis Atas Laporan Keuangan*. Rajawali Press.

Jitmau Fanny, Marpaung Cristine Sada, B. V. F. B. (2021). Analisis Penagihan Piutang Pada Cv. Pasir Raya Sorong. *Jurnal Pitis AKP*, *5*(1), 19–23.

Kasmir. (2019). *Pengantar Manajemen Keuangan* (7th ed.). Prenadamedia Group.

Kieso, D. E., Weygandt, J. J., & Warfield, T. D. (2020). *Intermediate Accounting* (17th ed.). John wiley & sons.

Lesawati, L., Soleh, A., & Ferina, Z. (2019). Peranan Laporan Keuangan Dan Penilaian Prinsip 5c Terhadap Efektifitas Pemberian Kredit Pada PT. Bank Bengkulu Cabang Tais. *Assets: Jurnal Ekonomi, Manajemen Dan Akuntansi, 9(1), 41-48.*

Mulyadi. (2016). *Sistem Informasi Akuntansi*. Salemba Empat.

Noorusyiam, S. W., Tyas, D. T. A., & Hidayatullah, M. F. (2024). Analisis Sistem Informasi Akuntansi Terhadap Prosedur Penagihan Piutang Customer Pt. Violet Indonesia. *JEMBA: JURNAL EKONOMI, MANAJEMEN, BISNIS DAN AKUNTANSI*, *3*(2), 85–94.

Prastyaningtyas, E. W. (2019). *Sistem Akuntansi*. CV. Azizah Publishing.

Rahman, F. M., Agussalim, A., & Badollahi, I. (2019). Sistem Informasi Akuntansi Atas Penagihan dalam Menunjang Keefektifan Penerimaan Kas pada PT. Fadel Pelumas Indonesia. *Invoice*, *1*(2), 153–170.

Romney, M. B., & Steinbart, P. J. (2018). *Accounting Information Systems*. Pearson Education Limited, England.

Rosyada, F. Y. (2023). Evaluasi Sistem Informasi Akuntansi Penjualan Atas Aktivitas Penagihan Piutang Dan Pengendalian Internal Pada UMKM. *UG Journal*, *17*(3).

Salamah, A., & Nurjaman, K. (2023). Prosedur Dan Alur Invoice Pada Pt. Ussi Kota Bandung. *Branding: Jurnal Manajemen Dan Bisnis*, *2*(1).

Sinta, D., & Sundari, S. (2024). Analisis Sistem Informasi Akuntansi Terhadap Efektivitas Penagihan Piutang PT. Sukses Sejahtera Bersama Indonesia. *Jurnal Ilmiah Ekonomi Dan Manajemen*, *2*(8), 92–97.

Warren, C. S., Reeve, J. M., Duchac, J. E., Wahyuni, E. T., & Jusuf, A. A. (2019). Pengantar Akuntansi 1 Adaptasi Indonesia Edisi 4. *Jakarta: Salemba Empat*, 440.

Weygandt, J. J., Kieso, D. E., Kimmel, P. D., Trenholm, B., Warren, V., & Novak, L. (2019). *Accounting Principles, Volume 2*. John Wiley & Sons.