Accounting Information Systems of Cash Revenue in the Service-Based Startup: Case Study of PT. Toto Tentrem Persada (Pest Republic)

Cholidul Ahmad Roditri[1], Vicky Vendy[2*]
Universitas Pembangunan Nasional "Veteran" Jawa Timur, Surabaya, Indonesia[1,2]
vicky.vendy.ak@upniatim.ac.id[2*]

Abstract. The Accounting Information System (AIS) has a pivotal role in the operations of service-based startups. This research aims to analyze the influence of using a simplified cash revenue accounting information system on Pest Republik, a startup company. A qualitative descriptive approach is employed to acquire an in-depth understanding of how the implementation of a simplified cash revenue accounting information system can impact the operational and financial aspects of Pest Republik. Research data is gathered through extensive interviews conducted with the owners and managers of the pest control startup. Several challenges are encountered, including limited availability of skilled human resources to operate the system, adaptation to necessary changes in business processes, and the periodic need for system updates in accordance with the company's progress. The employment of a simplified cash revenue information system yields multiple positive effects for Pest Republik. The simplified system enhances operational efficiency, thereby facilitating management and decision-making processes in the course of business operations.
Keywords: Information System, Cash Revenue, StartUp, Pest Control

I.   Introduction

Accounting Information Systems (AIS) have a very important role for service-based startups. In service companies, income and expenses can be more complex than in manufacturing companies. SIA helps service-based startups in recording and tracking revenue earned from services provided to clients. Through this system, companies can accurately monitor how much revenue is generated from each client, ensure timely payments, and identify revenue trends from the various services offered. Apart from that, SIA also helps companies manage expenses such as operational costs, employee salaries, and other expenses. With well-recorded financial information, startup companies can make smarter decisions in managing resources, developing growth strategies, and keeping company finances healthy and sustainable.

Startup companies have become an integral part of the modern digital economy. These startups are emerging rapidly across a variety of industry sectors, including technology, e-commerce, finance, healthcare, and more. To achieve success and sustainable growth, startup companies need an adequate accounting information system. An effective and efficient accounting information system is very important for startup companies. With the right information systems, companies can monitor their cash earnings in real time, understand revenue patterns, and better manage financial risks. The information obtained from these systems also allows management to make better decisions about resource management and business strategy.

Pest control is an important aspect of maintaining environmental health, cleanliness, and safety. In the context of the pest control industry, effective pest and insect control practices are a top priority for individuals, households, and businesses. Biologically pests will continue to grow. As long as environmental pests continue to reproduce, pest control service businesses will continue to be sought after. The pest control market in Indonesia continues to grow from year to year, following the growth of industries that require pest control services, such as the hotel industry, hospitals, office buildings, and so on. Regulation of the Minister of Agriculture of the Republic of Indonesia Number 24/Permentan/SR.140/4/2011 Pesticides are all chemicals or other materials including microorganisms and viruses that can be used for various purposes. Accounting information is produced by an orderly and systematic mechanism for processing data resulting from transactions that occur in the company (Aznedra, 2015). In the context of service industries, such as the pest control industry, accounting information systems play a key role in recording financial transactions, producing financial reports, and integrating operational processes with accounting functions.

This research aims to analyze the use of accounting information systems in the pest control industry at the Pest Republik startup. Pest Republik still maintains a simple system for recording financial reports, especially in reporting total cash income. So it is hoped that the use of an effective and simple accounting information system can help pest control companies manage financial information, supervise daily operations, monitor inventory, and increase efficiency and profits.

Through this research, the author hopes to identify the challenges faced by pest control companies in implementing and using a simple accounting information system. The results of this research are expected to provide valuable insight for pest control companies to improve or optimize the use of their accounting

information systems. It is hoped that the results of this research can provide a valuable contribution to the development and optimization of accounting information systems in the pest control industry.

II. Literature Review

Accounting Information System (AIS) is the process of identifying, collecting, and storing data as well as the process of developing, measuring, and communicating information which aims to produce information for decision makers (Romney & Steinbart, 2015). Previous research has recognized the benefits and challenges associated with implementing AIS in service companies. The research notes several challenges that may arise when implementing AIS in service companies, such as the complexity of performance measurement and internal control. A system is a group of elements that are closely related to each other and function together to achieve certain goals. Systems are created to handle things that repeatedly or routinely occur (Mulyadi, 2016).

Paul (2017) explained the important functions that an Accounting Information System forms in an organization, including the first, collecting and storing data about activities and transactions. Second, processing data into information that can be used in the decision-making process. Third, exercise appropriate control over organizational assets. Azhar (2013) stated that the function of an accounting information system is to support the company's daily activities, support the decision-making process, and help fulfill company management responsibilities.

The importance of AIS in integrating accounting functions with service company operations. They emphasize that an effective AIS can help service companies optimize cash revenue management, control operational costs, and increase customer satisfaction. However, this research also highlights that implementing AIS in service companies can involve challenges such as limited resources, insufficient understanding of AIS users, and incompatibility between existing systems and company needs.

Implementing a cash income accounting information system in service companies is crucial in efforts to manage and track financial information related to cash receipts. An effective accounting information system can help service companies manage the cash income received from the services they provide. Previous research has highlighted the importance of implementing a cash income accounting information system in service companies to improve internal control, speed up the financial reporting process, and increase the accuracy and reliability of financial information. Research conducted by Rahmadani (2018) showed that the cash receipt accounting information system at the water company is classified as good, however, there are still deficiencies in several parts that still use a manual system. Because manual systems carried out by humans have a greater percentage of errors compared to recording carried out by computer systems.

According to Astutik and Sulistyowati (2022), due to several procedures that are still carried out manually, the duties and functions of the cashier who doubles as holding cash, recording transactions, and depositing cash in the bank, as well as documents and accounting records which are still incomplete, it is based on the theory that This is considered to cause the implementation of the accounting information system for cash receipts and disbursements to be less effective, including weak internal control elements implemented by the company. Prasasti and Feranika (2021) explained that after a comparison was made between the theory and its application in the Jambi Sea transportation company, the cash receipts information system that had been implemented was adequate and effective. This is in line with the research conducted by Maknunah (2015) which also proves that the accounting information system for cash receipts and disbursements is running effectively at one of the universities in Malang. Based on the results of research conducted by Kabuhung (2013) show that the accounting information system for cash receipts and disbursements for financial planning and control in Church congregations in Manado is adequate because it is appropriate and fulfills the main elements of an accounting information system, namely human resources, equipment, forms/documents, records, procedures and reports , and has complied with internal control procedures.

Based on the results of research by Hermelinda et al. (2021), it can be concluded that the accounting system for cash receipts and disbursements at basic food companies in Bengkulu has procedures and flowcharts that are in accordance with the proper accounting system. The accounting records used in the Cash Disbursement Accounting System are distributed properly according to the needs of each section so that each section can view these records according to their authority. Similar research was also carried out by Fitri et al. (2021), it was explained that the accounting system for cash receipts for inpatient installations at a Regional General Hospital in Narmada was quite good. This can be seen from the existing patient admission procedures starting from inpatient registration until the patient is discharged. Accounting records

ensure that all transactions that occur are recorded properly and are supported by supporting documents that have been authorized by the authorized party. Other research related to the accounting information system for cash receipts and disbursements at an expedition company located in the Krui Branch, is classified as good, however, there are still shortcomings, namely that even though everything related to recording and disbursement of cash uses an accounting information system or AIS which works automatically without manual calculations by humans but still have weaknesses (Aiman, 2022).

III. Research Methods

This research will apply a descriptive qualitative approach to understand in depth how the cash income accounting information system is used in the pest control industry. A qualitative approach will allow researchers to explore the perceptions, experiences, and viewpoints of professionals involved in the use of accounting information systems in the pest control industry. A qualitative approach will allow the researcher to explore and understand the perspectives, experiences, and points of view of professionals involved in the use of AIS in Pest Republik.

In this research, researchers will use data collection methods such as in-depth interviews with financial managers, operational managers, and directors from Pest Republik, direct observation of the use of accounting information systems, and analysis of related documents such as financial reports and company policies. The interviews will be designed to explain how SIA was implemented, the benefits obtained, the challenges faced, and the efforts made to overcome these obstacles. In addition to interviews, direct observation of the use of AIS and analysis of documents such as financial reports, company policies, and related documents will be carried out to obtain a comprehensive understanding of the application of AIS in service companies. The time used for data collection is 22 May – 22 June 2023.

Through this research method, it is hoped that valuable information can be collected regarding the application of AIS in service companies, which can provide insight for companies in optimizing the use of AIS and overcoming challenges that arise.

IV. Results and Discussion

In this discussion section, the findings and analysis of qualitative research conducted regarding the service system run by Pest Republik and the implementation of the cash income accounting information system at pest control companies in Pest Republik will be discussed. The findings are the results of information system analysis and red lines from interviews by researchers with sources from Pest Republik.

"The operational system that is run in the company is not long and is relatively simple."

The Operations Manager revealed that Pest Republik only requires treatment staff to work in the field, and monitoring, supervision, and evaluation of treatment results are reported online.

"With the condition of Pest Republik which is still at the startup level and operations are not too complicated, the documents needed to record cash income are not too many and complicated."

According to the Financial Manager, Pest Republik's revenue system only needs to rely on contracts that have been agreed upon by both parties. If additional services occur, Pest Republik can record and invoice them at the end of the period. The Republic Pest Director also added that,

"Pest Republic's level is still a startup and the human resources we have are not yet experts in their field, so recording also uses a simple method. "We must not turn a blind eye to using more appropriate methods for financial recording. In the future, if the company becomes more advanced, of course, the company will need more detailed records in recording the company's finances."

At the end of the interview with the Director, he explained that Pest Republik would develop the system according to its needs. Currently, Pest Republik is still in a simple business phase and it is relatively easy to carry out its operations. As Pest Republik develops, the system used by Pest Republik will also develop and record all types of operational and financial systems. So, the author obtained several documents and parts related to the cash income system that is being implemented by Pest Republik. The documents used in the Pest Republik cash income system, are as follows:

1. **Service Form** is a sheet containing regular services according to the contract carried out by technicians while carrying out treatment at the pest control client's premises.

2. **Logbook** consists of two books, namely for reporting to clients and reporting to the office. The logbook for clients contains activities that have been carried out as well as recording extra services for clients.

Meanwhile, the logbook for the office is a record made by the technician about extra services and extra expenses while carrying out treatment at the client's place. So from these documents, the admin will sort out the expenses charged to the client or the company.

3. **Invoices** Service payments are accounting documents sent by service-based companies to their clients to request payment for the services they have provided. The contents of the service invoice, among other things, inform the client about the total payment that needs to be made, the payment deadline, and the form of service provided to the client.

4. **Proof of Payment Receipt** is a simple document that provides proof of payment for services to the company. The content is a statement that they have paid for the services that have been performed according to the contract.

5. **Ms. Excel related Total Revenue.** The final stage carried out by researchers was collecting data on cash income that had been repaid by clients. This data is recorded by the Pest Republik Financial Manager. The data is collected in a document called total revenue for Pest Republik for a certain period. Data is saved in Microsoft Excel format. Table 1 below is an example of Pest Republik's total income in a certain period recorded in Ms. Excel.

Table1. Dummy Total Republican Pest Revenue

Date	Client Name	No. Invoices	Invoice Issue Date	No. Receipt	Payment Date	Nominal
31 Jan 23	Hotel xxx	0108124xxx	20 Jan 23	922xxx	21 Jan 23	Rp x.xxx.xxx
31 Jan 23	PT. xxx	0108124xxx	20 Jan 23	922xxx		Rp x.xxx.xxx

The parts involved in the cash income system are as follows:

1. Treatment Staff. Staff who carry out pest control treatment in the field are obliged to fill in the attendance treatment report and logbook.

2. Operational Admin. The operational admin is obliged to sort out the expenses reported by the treatment staff and to whom the expenses will be charged. Extra services requested by the client will be automatically charged to the client when the invoice is issued. Meanwhile, operational staff expenses will be charged to Pest Republik's treasury.

3. Operational manager. Documents and reports created by the operational admin will be forwarded to the operational manager for validation and will then be given to the accounting department at Pest Republik.

4. Finance Manager. Documents and reports that have been approved by the operational manager will then be recorded by the Pest Republik accounting department. The financial manager is obliged to issue invoices to be submitted to clients. From previous notes, expenses charged to clients will be added to invoices made within a certain period according to the work contract. Finally, the financial manager is obliged to record the cash that has been paid by the client into the Total Revenue Pest Republik data.

5. Republican Pest Director. Obligated to validate documents created by managers.

Next is a discussion that covers several important aspects, including pest control companies' needs for a cash income accounting information system, the benefits obtained from implementing a cash income accounting information system, challenges faced in implementing a cash income accounting information system, as well as recommendations for pest control companies in improving the use and effectiveness of the cash income accounting information system.

1. Pest Control Company Needs a Cash Income Accounting Information System. Pest control businesses involve direct service transactions with customers. Pest control companies need an accounting information system that can record and track cash income accurately and efficiently.

2. Benefits of Implementing a Cash Income Accounting Information System. Implementing a cash income accounting information system in pest control companies provides several significant benefits. Cash income accounting information systems help companies better record and track cash income, allowing a more in-depth analysis of the sources and uses of that income.

3. Challenges in Implementing a Cash Income Accounting Information System. Key challenges include difficulties in integrating cash revenue accounting information systems with existing systems, complexity in recording and tracking diverse cash revenue transactions, and the need for a good understanding of a company's business processes to design appropriate systems.

4. Recommendations for Pest Control Companies. Several recommendations can be given to companies to improve the use and effectiveness of cash income accounting information systems. First, is the identification of the company's special needs. In this case, companies should consider the most common types of revenue transactions, the business processes involved, and specific reporting and analysis needs. Second, integration with existing systems. Pest control companies need to consider integrating cash income accounting information systems with existing systems. This will ensure a smooth flow of data between different systems and prevent duplication or loss of data. Third is training for human resources. Companies need to invest time and resources in training employees regarding the use of accounting information systems. Comprehensive training will help employees understand the functionality of the system, the cash revenue recording process, and the analysis and reporting capabilities provided by the system.
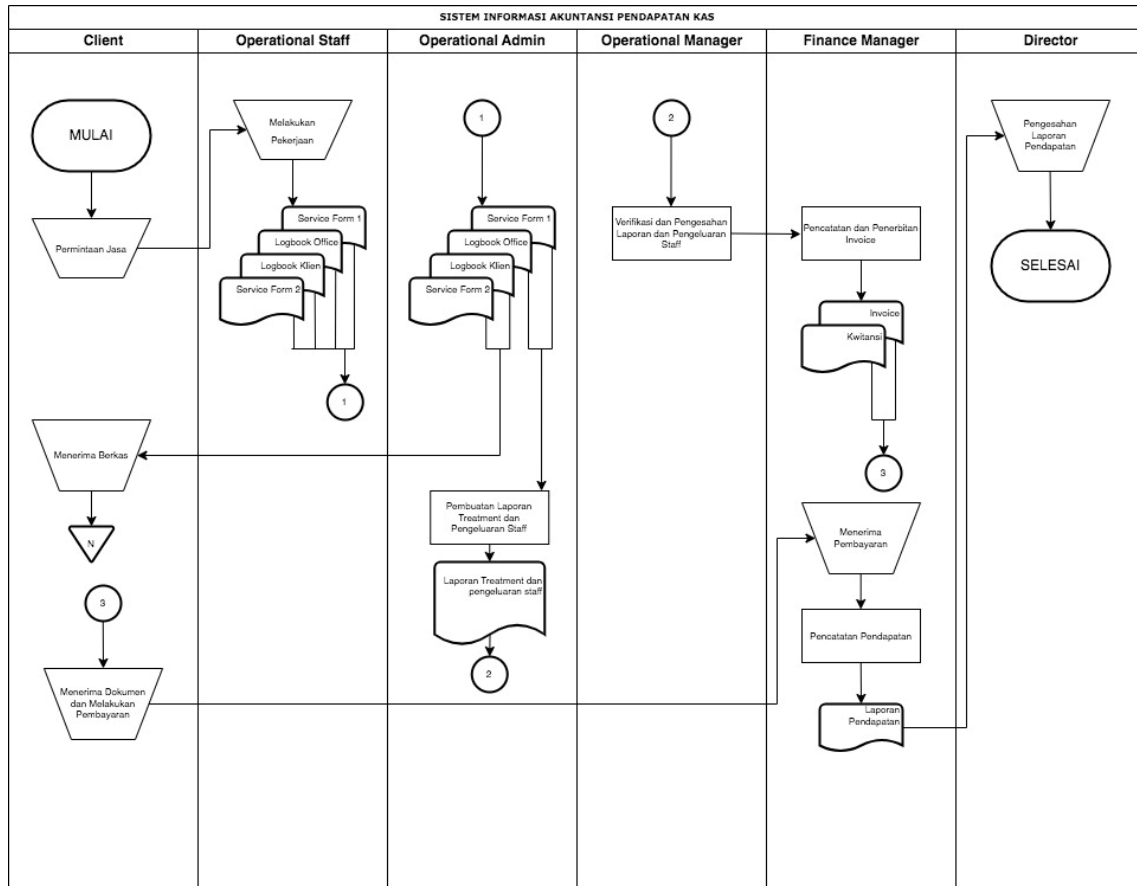

Figure 1. Cash Income Accounting Information System Flowchart

V. Conclusion

Based on the research results, the researchers concluded that the system used by Pest Republik in recording cash income was still relatively simple. This can happen because Pest Republik is still at the startup level in running its business. However, this simple recording has a positive influence on Pest Republik because a simple system can make it easier for Pest Republik to run its business.

Using a simple Cash Income Accounting Information System in Excel provides flexibility and ease in managing financial records. So in the pest control industry which is currently developing, creating a simple accounting information system has a good impact on Pest Republik. Startup companies often face challenges in monitoring their cash generation efficiently. However, by using Excel as a primary tool, companies can easily record, track, and analyze their cash income quickly and effectively. This helps improve operational efficiency and company financial monitoring.

Apart from that, the Simple Cash Income Accounting Information System in Excel also provides high accessibility for users. At startup companies, not all team members have a strong financial background or access to sophisticated accounting software. However, almost everyone has access to Excel and is familiar

with its use. By leveraging this familiar tool, companies can involve more people in financial monitoring and facilitate collaboration in decision-making.

This qualitative research shows that a simple Cash Income Accounting Information System recorded in Excel can support the financial system of pest control startup companies. By providing flexibility, transparency, accuracy, and accessibility, this system helps improve financial management, revenue monitoring, and better decision-making. Although there are limitations such as less detailed recording and the possibility of fraud in operations, this solution is suitable for early-stage startup companies and can be a stepping stone for the development of more sophisticated accounting systems in the future.

Although the Simple Cash Income Accounting Information System in Excel provides many benefits, it is important to remember that it is a simple solution and may have limitations in terms of scale and complexity. As the company grows, it needs to consider adopting a more advanced and integrated accounting system. With the existence of a simple accounting recording system and automatic billing system, it is hoped that companies will be able to improve their performance in business. Suggestions that can be given in terms of developing an accounting system at a further stage are very necessary for companies so that the company's accounting system will be able to cover all company activities.

This research is limited by the company's unstable situation because it is still a startup. With existing limitations, the scope of research is also limited. It is hoped that future researchers will be able to raise themes and cases that are more of a focus for the development of Pest Republik. With more in-depth research into the financial system of Pest Republik, this could become one of the processes in developing Pest Republik's business.

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