Quantitative Economics and Management Studies (QEMS) *ISSN: 2722-6247 (online)*
Vol. 5 No. 2 (2024)
https://doi.org/10.35877/454RI.qems2501

Analysis of Accounting Information System for Raw Material Inventory at PT. Smart Tbk. Padang Halaban

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Abstract

The Accounting Information System (AIS) is a vital component in providing financial and accounting data, along with information related to daily accounting transactions. This research focuses on evaluating the effectiveness of AIS using ERP-SAP in managing raw material inventory and supporting production efficiency at PT. Smart Tbk. Padang Halaban, a palm oil plantation company. The qualitative descriptive method was employed to gather data through literature review, interviews, and direct observations. The results of the study indicate that the implementation of AIS using ERP-SAP has improved the standard of financial reporting, meeting the required qualitative criteria. However, limitations exist in the AIS application, particularly regarding suboptimal raw material inventory tracking and integration issues between different systems, such as inventory and accounting systems, leading to data discrepancies. The conclusion drawn from this research highlights the necessity for adjustments, developments, and improvements in AIS features to meet the specific company requirements. The implications of these findings emphasize the importance of continuously optimizing AIS to support more efficient and accurate business processes, while adapting to technological advancements and company needs.

Keywords: System; Information; Accounting; Production; ERP-SAP.

Received: 9 January 2024 Revised: 13 April 2024 Accepted: 27 April 2024

1. Introduction

In the current business era, intense competition is testing companies in Indonesia, both in the industrial and service sectors. In facing these challenges, the accounting information system (AIS) becomes a crucial key in managing production and sales processes. The production process transforms raw materials into saleable goods, involving various production factors that must be clearly directed according to the company's goals. The effectiveness of the production and sales processes heavily depends on the availability of sufficient raw materials. Manufacturing companies, especially large ones, face the complexity of production processes that require systems capable of facilitating business and optimizing production. Issues such as machine breakdowns, raw material scarcity, and failure to achieve production targets are major challenges that can negatively impact profitability, stakeholder confidence, and company stability.

According to Sari (2018), inventory in companies is a valuable asset that has significant implications depending on its availability. Having a large inventory capacity results in unavoidable costs to maintain it. On the other hand, inventory shortages can disrupt the company's production and sales processes. An effective company in managing inventory is one that can maintain the right balance without having excess stock of goods.

According to Wulandari et al (2018), inventory is an asset owned by companies for sale in normal business operations or for use in the production process of goods intended for sale. Raw material inventory specifically refers to items acquired in raw or unprocessed form, which require additional processing stages to become primary components in products and undergo transformation into finished products through the production process. Managing raw material stock is a crucial aspect for every type of business, whether in the trading or manufacturing sector (Kinanthi et al.,

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2016). Factors influencing raw material inventory include the origin of raw material supply, transportation, storage, weather and climate conditions, as well as raw material prices (Silvia, 2019).

Post-production sales processes require the presence of optimal product quality and effective sales strategies to boost sales volume, ultimately contributing to profitability and customer satisfaction. Challenges such as product demand forecasting, maintaining product quality, and selecting efficient distribution channels are the primary focuses in ensuring the success and continuity of the company amidst dynamic market competition. (Syafina, 2024).

Therefore, without adequate inventory, companies risk being unable to meet customer demand for products sold at specific times. This situation can arise from products not being available when needed, resulting in the company missing out on potential profits

Inventory management of raw materials is highly crucial as it represents a valuable asset for the company that is sensitive to time, threatened by market price fluctuations, damages, and potential costs arising from mishandling. To achieve its goals, a company needs an effective system that helps ensure inventory management aligns with the company's managerial principles.

According to a study by Devi Lestari Pramita Putri dan Rr. Anisa Nuraini Primasari (2020), titled "Implementation of Accounting Information System and Internal Control of Inventory at Yoris Bakery Pamekasan," it is concluded that the lack of effective accounting information system procedures in managing the receipt and issuance of raw materials can lead to excessive use of raw materials, ultimately causing losses to the company. Additionally, if inventory functions are not well-managed, it can result in raw material shortages, negatively impacting the smoothness of the production process.

According to Fikri Hermawan dan Dessy Evianti (2021), in their research titled "The Role of Accounting Information System for Raw Material Inventory in Supporting the Smoothness of Production and Sales Processes: A Case Study at PT. Damar Bandha Jaya Corp. Bogor," it is concluded that inaccuracies in procedures and the lack of an effective accounting information system in managing the receipt and issuance of raw materials can lead to excessive use of raw materials, ultimately causing losses to the company. Additionally, the improper implementation of inventory functions by the company can result in raw material shortages, negatively impacting the smoothness of the production process.

The information system plays a critical role in the overall business operations, encompassing marketing, production, and distribution facets (Lonto & Pandowo, 2023). PT. Smart, Tbk Padang Halaban, stands as one of the firms that embraces an Accounting Information System (AIS) utilizing the System Application and Product in Data Processing (SAP). Operating under PT Sinar Mas Agro Resources and Technology Tbk (PT SMART Tbk), the company operates in the agribusiness sector with a business model that integrates the entire value chain from seedling to shelf and is recognized as a global leader in its sector. The company continues to innovate its information systems to ensure high-quality products that meet customer expectations consistently.

The implementation of this information system is carried out systematically, from operational to functional levels, with a focus on developing work programs that support the company's vision and business strategy. According to interviews with several informants at PT. Smart Tbk. Padang Halaban, initially, the company relied solely on Microsoft Excel for planning purchases, recording raw material purchases, monitoring raw material usage, and compiling raw material inventory reports. However, in practice, the company faced challenges, especially concerning the alignment between administrative and physical data regarding raw materials.

As a palm oil producer, PT. Smart, Tbk Padang Halaban operates various processing facilities to produce high-quality products marketed internationally, covering agronomy, food, oleochemicals, and bio-energy segments. To address these challenges, PT. Smart Tbk. Padang Halaban decided to switch to an ERP-SAP-based AIS, with the hope of improving financial management efficiency and enabling decision-making with more accurate information.

The implementation of the raw material inventory AIS at PT. Smart Tbk. Padang Halaban aims to establish efficient and controlled raw material inventory management. This is done by integrating the company's management principles into the raw material inventory AIS, with the expectation of generating reliable raw material inventory reports in line with company management policies.

An accounting information system is a system that manages accounting data with harmonious coordination between humans, devices, and procedures within an organizational entity (Putra, 2018). Its main objective is to support the provision of economic information for the company, which is crucial for various parties to carry out their tasks and responsibilities (Rahma, 2020).

SAP is a tool and management system that helps companies plan and execute various daily activities. SAP is one of the widely used Enterprise Resource Planning (ERP) software by large-scale companies. In the financial context, ERP-SAP is used because it has programs that enable the creation, storage, and management of financial data. In this research, ERP-SAP is used as an AIS to manage raw material inventory and support production smoothness at PT. Smart Tbk. Padang Halaban.

The purpose of this research is to assess the effectiveness of AIS using ERP-SAP in managing raw material inventory and facilitating production smoothness at PT. Smart Tbk. Padang Halaban's palm oil plantation.

2. Literature Review

2.1. Accounting Information System

A system is a unity consisting of interconnected components or elements that work together to facilitate the flow of information, material, or energy to achieve a goal. This term is often used to describe a set of interacting entities, where a mathematical model can often be created. Meanwhile, information is data that has been given meaning through context. An information system is a set of interconnected components that function to process, collect, store, and disseminate information to support decision-making and supervision within an organization. An accounting information system is an accounting data processing system that coordinates humans, tools, and methods that interact harmoniously within a structured organizational framework to produce structured financial accounting information and management accounting information as well (Putra, 2018). An accounting information system is a system that provides accounting and financial information along with other information obtained from routine accounting transaction processes. The main purpose of the accounting information system is to assist in providing economic information for the company, which is crucial for many parties to carry out their tasks and responsibilities (Rahma, 2020).

2.2. ERP-SAP

ERP refers to the concept of integrating business processes into one system. Meanwhile, SAP is the name of a company that provides ERP solutions, as well as various other technology solutions. SAP has another function, which is to enhance corporate governance to instill investor confidence by providing an overview of performance through real-time transaction systems. This system can be configured according to the needs of the users (Ramadhanty, 2020). On the other hand, SAP is an Enterprise Resources Planning (ERP) software, which is an IT tool and management system designed to help companies plan and carry out various daily activities. SAP is used in financial departments because it includes a program for creating, storing, and managing financial data. SAP is a system used to support activities running within an organization automatically, thus enhancing efficiency and productivity efficiently. SAP also has another function, which is to enhance corporate governance to instill investor confidence by providing an overview of performance through real-time transaction systems. This system can be configured according to the needs of the users (Ramadhanty, 2020). The main difference between ERP and SAP is that ERP refers to the concept of integrating business processes into one system, while SAP is the name of a company that provides ERP solutions, as well as various other technology solutions (Wahyuddin, 2018).

2.3. Inventory of Raw Materials

Inventory is an asset that includes items owned by a company intended for sale within a specific operating period, or inventory of items still in progress or under production process, or raw materials inventory awaiting use in a production process. On the other hand, raw materials are materials or components needed and used in making a product in an industry. These materials or components will be evident in the finished products ready for marketing. Raw materials inventory refers to the cost of raw material supplies used in the production process being stored.

Raw materials inventory stores the cost of raw material supplies used in the production process or in providing services. Controlling raw materials inventory is crucial because raw materials are one of the factors ensuring the smoothness of the production process. The purpose of raw materials inventory is to meet the needs of raw materials for the production process in the future. With raw materials inventory, a company, for example, an industrial company, can carry out the production process to produce finished goods that are then sold or marketed according to consumer needs or demands, aiming for profit from these sales (Mulyadi, 2018).

Therefore, it can be concluded that raw materials inventory is the unprocessed basic material provided by a company to be used in the production activities of the company. Raw materials are crucial in production companies. Limitations or excesses in raw materials inventory can become problems for the company. Factors influencing raw materials inventory include the source of raw materials, transportation, warehousing, weather and climate, and raw material prices (Silvia, 2019).

3. Research Method and Materials

The research focuses on the implementation of the SAP accounting information system for raw materials inventory in a manufacturing company in the Oil Palm Plantation sector, namely PT. Smart Tbk. Padang Halaban, located in Perkebunan Padang Halaban, Sidomulyo, Aek Kuo, North Labuhan Batu Regency, North Sumatra, 21455. The research was conducted from July 2023 to December 2023.

The approach used in this research is a qualitative and descriptive approach. According to Sugiyono (2016), qualitative research method is used to examine the condition of objects naturally, where the researcher becomes the key instrument in the research process.

Data collection techniques used in this research include observation, interviews, and literature/documentation study. The selection of informants was done using purposive sampling technique, which according to Arikunto (2006), is a non-random sampling technique based on considerations focused on specific objectives, not based on areas or strata.

In this study, the researcher conducted in-depth interviews with three informants intentionally selected based on their positions directly involved in managing raw materials inventory using SAP accounting information system. The first informant is C. Wardhana, who serves as Assistant Manager of Sustainability & Certification (Askep). The second informant is Geovantri, who serves as Spo Officer. The third informant is Fredy Susanto, who serves as the Chair of the KTU Unit Team. The selection of informants based on their strategic positions in managing raw materials inventory is expected to provide a deep understanding of the implementation of accounting information system in the company's daily practices.

In conducting observations, the researcher directly observed the implementation of the SAP Accounting Information System for raw materials inventory at PT. Smart Tbk. Padang Halaban. Observations were made on various accounting records, documents, and Standard Operating Procedures (SOPs) applicable in the company. Furthermore, the interview method used in this research is unstructured interviews to gain a deeper understanding of activities such as planning purchases, recording raw material purchases, monitoring raw material usage, and preparing raw material inventory reports conducted using the SAP accounting information system.

In the context of literature review, Nazir (2013), explains that data collection techniques involve reviewing various sources of information such as books, literature, notes, and relevant reports related to the research problem. This technique is used to obtain foundational knowledge and written opinions through literature analysis related to the research topic. Additionally, this technique is also utilized to obtain secondary data that can be used as a basis for comparison between theory and field practice, such as reviewing literature, previous research results, lecture notes, and other sources relevant to the research conducted.

4. Results and Discussion

PT. SMART Tbk Padang Halaban is a company engaged in agribusiness with a business model that integrates the entire value chain from seedling to shelf, operating under the umbrella of PT Sinar Mas Agro Resources and Technology Tbk (PT SMART Tbk). In partnership with farmers, the company focuses on oil palm cultivation and produces various food and fuel products designed to meet needs, with an emphasis on sustainable practices. PT. SMART Tbk Padang Halaban has two main parts, namely Estate and Mill. The Estate is responsible for administration, plantations, and data management, while the Mill is the factory part that handles the harvesting process from raw materials to finished products. According to Mr. Geovantri, Spo Officer, "The oil palm plantations of PT. Smart Tbk. Padang Halaban use the System Application and Product in Data Processing (ERP-SAP) to support the financial reporting process in the company. ERP-SAP is used to manage all types of transactions, including human resource activities, forecasting, and financial reporting. In the material stock inspection process, the ERP-SAP system provides convenience and accuracy in monitoring and managing raw material inventory at PT. SMART Tbk Padang Halaban." In the context of material stock inspection, the use of the ERP-SAP system shows that the process is computerized and well-documented. The data validity method in this process involves periodic data verification by

trained personnel, accurate transaction recording in the system, and the use of appropriate reporting tools. Data quotes from Mr. Geovantri's statement provide direct information about the use of ERP-SAP in the company and the importance of this system in supporting material stock operations and management. Thus, it can be concluded that the ERP-SAP system plays a crucial role in maintaining the accuracy and reliability of data in material stock inspection at PT. Smart Tbk. Padang Halaban. The material stock inspection process of the SIA can be seen in Figure 1.

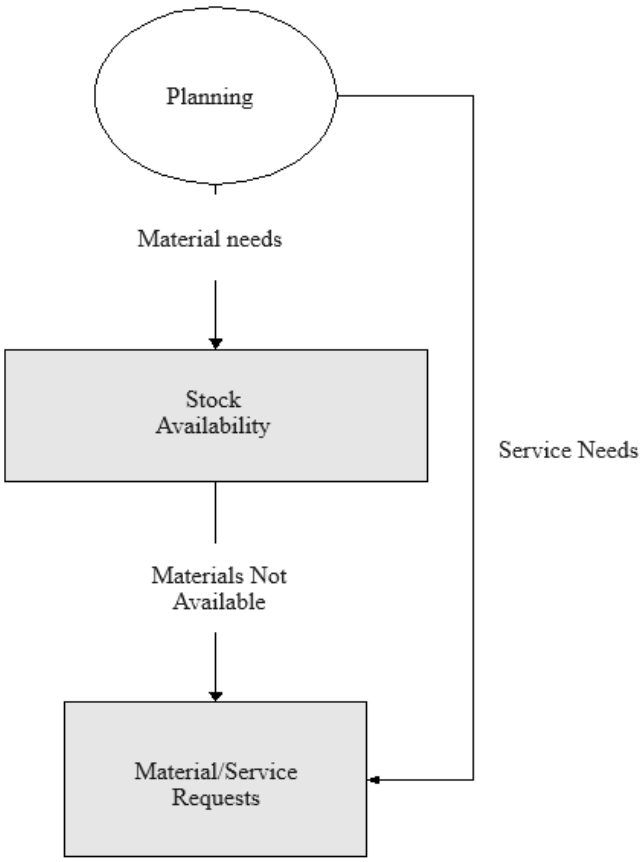

Figure 1. SAP System Material Stock Inspection Process
Source: PT. SMART Tbk, 2023

The palm oil plantation of PT. Smart Tbk. Padang Halaban implements several modules from the ERP-SAP system, including FI (Finance), CO (Controlling), MM (Material Management), PS (Project System), and PM (Plant Maintenance). This was stated by Mr. Geovantri, the Spo Officer at PT. Smart Tbk. Padang Halaban, who mentioned that "At PT. Smart Tbk. Padang Halaban, there are five ERP-SAP modules implemented, namely FI (Finance), CO (Controlling), MM (Material Management), PS (Project System), and PM (Plant Maintenance)."

4.1. Company Code

Table 1. Company Code

Before visit (as is):	After revisit (to be)
Company code three digit: Estate/ mill /MCP/Bulking • Rama Bakti Inti Est: 030 • Rama Rama Inti: 031 • Rama Rama Mill: 032 • Sungai Tapung Inti Est: 043 • Rama Rama KCP: 045	Company code four digit: Legal Entity (PT) • PT. Ramajaya Pramukti – 2100 ✓ 2 First Digit = 21 = Code of PT Name ✓ 2 Last Digit using number 00

Source: PT. Smart Tbk. Padang Halaban, 2023

a) Business Area (BA) is a code that groups several operating units according to geographical location and activities. It is used to generate Balance Sheet (B/S) and Income Summary (I/S) reports, specifically for external reporting needs. BA uses a 3-digit numeric format: XYY, for example, the code 201 represents (Plantation Sumatera).

Table 2. Business Area

BA Industry	BA Geography
• 1 for HO • 2 for Plantation • 3 for Refinery • 4 for Other	• 01 for Sumatera • 02 for Jawa – Bali • 03 for Kalimantan • 04 for Sulawesi • 05 for Maluku • 06 for Papua

Source: PT. Smart Tbk. Padang Halaban, 2023

b) The chart of accounts contains a collection of organized account codes, using a combination of numbers, letters, or both, making it easier to place these accounts into the general ledger.

Table 3. Chart of Account

Sebelum visit (As - Is):	Sesudah revisit (To - Be)
▪ **SMA** ▪ **7 digit**	▪ **ZSMA** ▪ **8 digit**
Account Example: 71xxxxx Nursery 72xxxxx Land Clearing 73xxxxx Immature 74xxxxx Mature Upkeep 75xxxxx Harvest 76xxxxx Transport Harvest 78xxxxx By Process, Maintenance 90/91xxxxx By Overhead/GA	Account Example: 600xxxxx Material + Cost Object 601xxxxx Salary + Cost Object 602xxxxx Transportation + Cost Object 701xxxxx By Overhead/GA+ooooooooooo

Source: PT. Smart Tbk. Padang Halaban, 2023

The table 3 the chart of accounts after the revisit has the account 600.xx.xxx G/L Acc Group Material, which shows five explanations in the chart of accounts, namely:

1) 600.01.xxx Plantation Material

Table 4. Plantation Material

G/L Inventory	Material Class	G/L Expense	Description
140-01-100	Fertilizer	600-01-100	Cost of Fertilizer Usege
140-01-200	Herbicide	600-01-200	Cost of Herbicide Usage
140-01-300	Pesticide (Inc Simrat)	600-01-300	Costs of Pesticide Usega
140-01-400	Processing Chemical	600-01-400	Costs of Chemical Processing Usage
140-01-500	Other Chemical	600-01-500	Costs of Other Chemicals Usage
140-01-600	Laboratory tools & Sparepart	600-01-600	Costs of Lab Tools & Spare Parts-Mat Usage
140-01-700	Plantation tools & Equipment	600-01-700	Cost of Plant Tools & Eq. –Matt Usage
		600-01-710	Costs of Harvesting Tools and Equipment Usage
		600-00-100	Costs of Land Survey, Measurement and Construction-Materials
140-01-800	Nursery Item	600-01-800	Costs of Nursery Items Usage
140-01-900	Legiuminosa Covercorp	600-01-900	Costs of LCC Usage

Source: PT. Smart Tbk. Padang Halaban, 2023

The table 4-8 shows the account chart found in PT. Smart, Tbk Padang Halaban. In addition, there is the code 601.xx.xxx G/L Acc Group Labour, which consists of 601.01.xxx Internal Labour, 601.02.xxx External/Mandoran (Harvesting), 601.03.xxx Contractor/Mandoran (Non Harvesting), 601.04.xxx Toll Process, and 601.05.xxx Project Settlement – Labour. There is also the code 602.xx.xxx G/L Acc Group Transport, which consists of 602.01.xxx Non Product, 602.02.xxx Product, and 602.05.xxx Project Settlement – Transport.

2) 600.02.xxx General Material

Table 5. General Material

G/L Inventory	Material Class	G/L Expense	Description
140-02-100	Sparepart	600-02-100	Costs of Spare Parts Usage
140-02-200	Fuel, Oil, Lubricant & Consumal	600-02-200	Costs of Fuel, Oil, Lubricant & Consumables
140-02-300	Electrical & Instrument Material	600-02-300	Costs of Electrical Usage
140-02-400	Construction Material	600-02-400	Costs of Cons Material Usage
		600-00-100	Costs of Surveying, Measuring and Construction of Land
140-02-500	(Incl Titi Panen, Gorong2)		Materials
140-02-600	Tools & Workshop Equipment	600-02-500	Costs of Eq-Mat Tools & Workshop Usage
	Medicine & Medical item	600-02-600	Costs of Medicine & Medical Items Usage

Source: PT. Smart Tbk. Padang Halaban, 2023

3) 600.03.xxx Other Material

Table 6. Other Material

G/L Inventory	Material Class	G/L Expense	Description
140-03-100	Stationary	600-03-100	Costs of Stationary Usage
140-03-200	Others	600-03-200	Costs for Other Materials Usage

Source: PT. Smart Tbk. Padang Halaban, 2023

4) 600.04.xxx External Material

Table 7. External Material

G/L Inventory	Material Class	G/L Expense	Description
		600-04-100	Costs of External Materials Usage
		600-04-200	Costs of Direct Purchase

Source: PT. Smart Tbk. Padang Halaban, 2023

5) 600.05.xxx Project Settlement - Material

Table 8. External Material

G/L Inventory	Material Class	G/L Expense	Description
		600-05-990	Settle Biaya Land Acquisition -Bahan
		600-05-991	Settle Infr. Bibitan -Bahan
		600-05-992	Kliring Biaya Bibit Ke Persediaan Bibit WIP -Bahan
		600-05-993	Settle Land Clearing -Bahan
		600-05-994	Settle Biaya Project -Bahan
		600-05-995	Settlement Immature Dev – Bahan
		600-05-996	Settlement Immature Upkeep -Bahan

Source: PT. Smart Tbk. Padang Halaban, 2023

The CO (Controlling) module is related to cost calculation, cost analysis, cost planning, and business overhead management. Controlling consists of Profit Center Accounting (PCA), which is an Operating unit Level, using a 4-digit numeric code XXYY where the first 2 digits follow the company code's first 2 digits, and the last 2 digits are set. CO includes several components such as Profit Center Accounting (PCA) for operational units, Cost Center as cost recipients and senders, Internal Order as a temporary cost container, Cost Element to record usage or activities, and Activity Type as a means to identify types of activities.

The MM (Material Management) module manages materials from the beginning to the finished product, including Plant, Storage Location, and Purchasing Organization.

The PS (Project System) module is related to investment and project activities, including Project, Work Breakdown Structure, Network, and Activity. As Mr. Geovantri stated, "*in the project system module, Project, Work Breakdown Structure, Network, and Activity are required. During the project, the network is used as a basis for planning, analysis, control, and monitoring of schedule, date, and resources (manpower, machine, material, and document),"* he explained.

4.2. Flow of Presenting Financial Reports Using ERP-SAP based AIS

The process of generating financial reports has been streamlined and automated through ERP-SAP. However, specific steps must still be followed to ensure accurate presentation. These steps encompass several stages:

Initially, users must log in to the portal provided by PT. Smart Tbk Padang Halaban by entering their username and ERP-SAP password to access the system. Upon successful login, users need to open the ERP-SAP application and select the Financial Management (FM) module to prepare their financial reports. Subsequently, users open the general ledger code, enter the account code into the provided table, and input the transaction date they wish to report. Following data entry, the ERP-SAP system promptly displays the desired data, including the total amount for the inputted date. Users must then export the database from ERP-SAP to Excel format and verify that the end-of-reporting period balance matches the recorded transaction code (tcode). Finally, after accurately entering all data, the Excel worksheet for the financial report will automatically populate using vlookup and hyperlink formulas from the exported ERP-SAP database, making the financial report ready for presentation to relevant parties. Mr. Geovantri outlines these procedures as part of the process for presenting financial reports using the accounting information system.

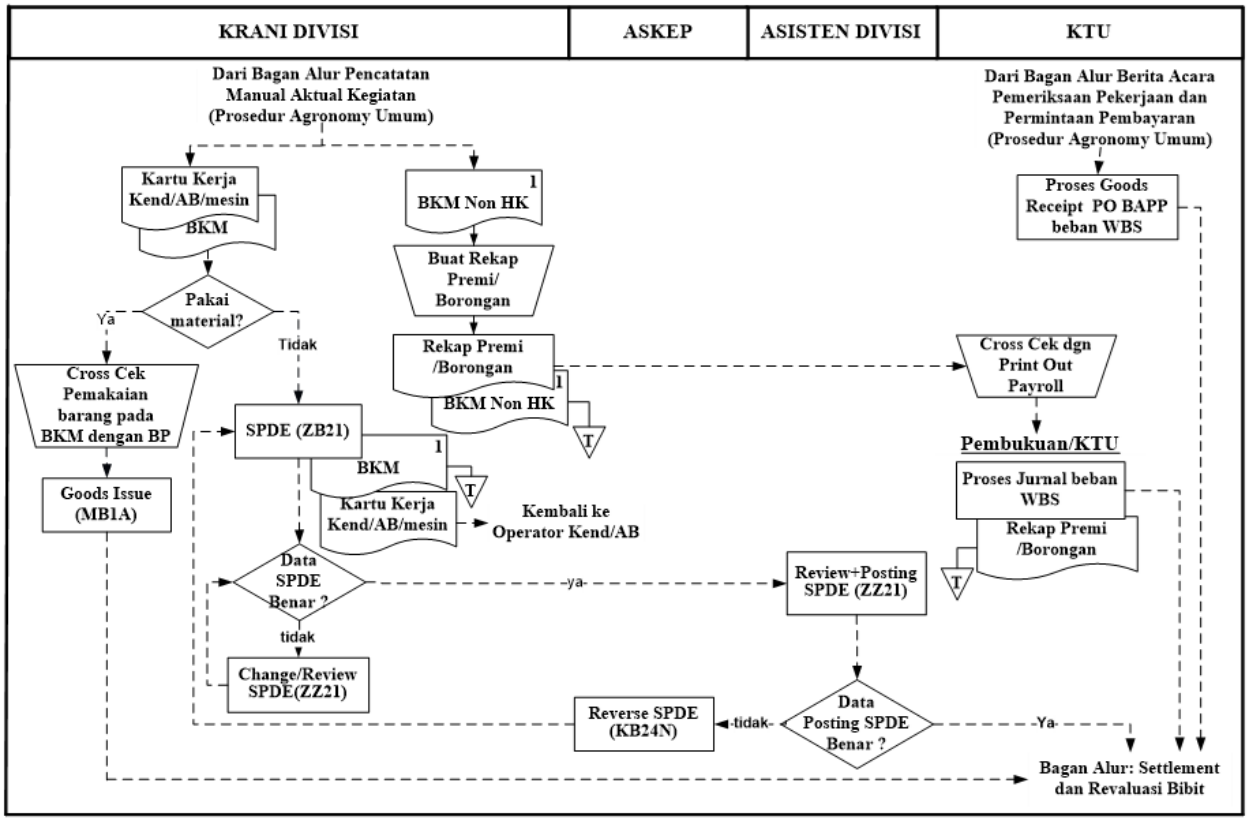

Figure 2. Flowchart of Actual Recording in SAP
Source: PT. Smart Tbk. Padang Halaban, 2023

The diagram on Figure 2 and 3 illustrates the actual recording process in the ERP-SAP system to ensure that financial reports provide valuable insights to users. It is crucial that these reports have high-quality and relevant information to support decision-making. The quality of these reports is reflected in their ability to meet the qualitative standards set for reporting. The importance of report quality cannot be overstated, as accurate and transparent information disclosure is at the core of financial concepts and transparency. In this regard, Mr. C. Wardhana, as Askep 1 of PT. Smart Tbk Padang Halaban, stated, *"Quality reports are those that are accountable, meaning all recording processes are in line with on-the-ground realities and supported by relevant documents."*

He also added that the implementation of ERP-SAP-based AIS at PT. Smart Tbk, Padang Halaban, has proven to produce financial reports that meet the required standards for financial reporting. *"In its implementation, ERP-SAP-*

based AIS at PT. Smart Tbk, Padang Halaban, has been able to generate high-quality financial reports that meet the qualitative requirements of financial reporting," he further mentioned.

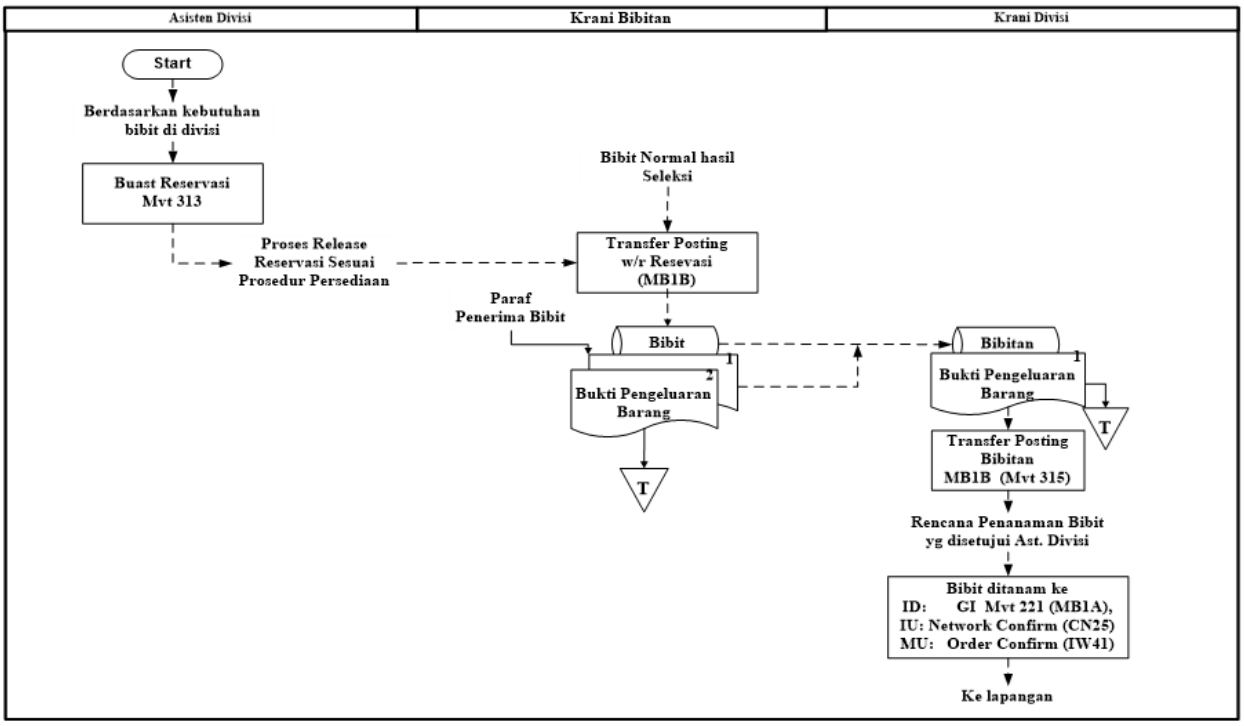

Figure 3. Flowchart of Seed Request and Planting
Source: PT. Smart Tbk. Padang Halaban, 2023

From this interview, it is evident that the use of ERP-SAP-based AIS at PT. Smart Tbk Padang Halaban has successfully improved the quality of financial reports. The implementation of the ERP-SAP system meets the qualitative criteria of financial reporting, resulting in high-quality reports. The effectiveness and accuracy in delivering financial information to report users have improved significantly due to this system.

4.3. Constraints found in ERP-SAP based AIS regarding Raw Material Inventory

ERP-SAP not only records inventory transactions but also serves as the basis for strategic decision-making regarding stock management, procurement, and efficient use of raw materials. Evaluating and improving this system is a crucial step to ensure operations align with business objectives and meet user needs. By conducting regular evaluations and responding to findings with appropriate corrective actions, companies can enhance system performance, information accuracy, and support more effective decision-making. Below are the interview findings with informants regarding the challenges identified in the ERP-SAP Raw Material Inventory SIA used by PT. Smart Tbk Padang Halaban, summarized into several points.

- There are several limitations or mismatches in the SIA features of ERP-SAP that do not meet the specific needs or business processes of the company. For example, there are specific requirements related to tracking raw material inventory that are not fully met by the built-in features of the SIA application at PT Smart.
- Overall, the reliability and performance of SIA in processing raw material inventory transactions in real-time are quite good. However, there are some cases where there are delays in updating raw material inventory data, especially when transaction volumes increase suddenly. The company continues to monitor the performance of ERP-SAP to improve infrastructure and operational processes to minimize delays or errors in data updates.
- There are issues related to integration between different systems used in PT Smart Tbk Padang Halaban, such as inventory systems with accounting systems. One of the main problems is the gap in data structure between these two systems. This can lead to mismatches or errors in transferring data between the inventory system and the accounting system.

The analysis regarding this matter encompasses several crucial points regarding the SIA utilized by PT Smart Tbk Padang Halaban. Firstly, there are limitations within the ERP-SAP features that do not entirely fulfill the specific company needs, such as suboptimal tracking of raw material inventory. This underscores the necessity for adjustments or feature enhancements in the application to align with specific business requirements. Secondly, while the reliability and performance of SIA are generally satisfactory, there are still delays in updating raw material inventory data when transaction volumes abruptly surge. This underscores the importance of enhancing infrastructure and operational processes to minimize such delays.

Additionally, there are issues concerning the integration between disparate systems, such as inventory systems and accounting systems, which may result in data structure gaps. These discrepancies have the potential to lead to mismatches or errors in data transfer between the two systems. More concerted efforts are needed to address these integration challenges to ensure smooth and accurate data exchange between systems, particularly between inventory and accounting systems.

These enhancements need to align with what Alienta et al (2023), emphasized, that technical support is crucial during ERP-SAP system maintenance, involving the rectification of errors identified by users, thus the analysis and design stages must minimize errors. Swift response from experienced consultants is required in case of errors, to uphold user trust in the system.

5. Conclusion

The Accounting Information System (AIS) has played a key role in enhancing the quality of financial reporting at PT. Smart Tbk Padang Halaban, especially following the implementation of ERP-SAP which has raised the standard of financial reporting presentation and met qualitative criteria. This has proven significant compared to the previous system, which was less integrated, presenting challenges in data transmission and hindering the quality of financial reports and production process efficiency. AIS analysis also highlights some limitations in ERP-SAP features that are not fully aligned with the company's specific needs, particularly regarding tracking raw material inventory and delays in data updates when transaction volume suddenly increases. To address this, further efforts are needed to address integration issues between inventory and accounting systems. Nevertheless, the implementation of the accounting information system based on ERP-SAP has brought significant benefits to PT. Smart Tbk Padang Halaban through a well-organized structure, improving operational efficiency, and enhancing overall company performance.

Acknowledgements

The author extends heartfelt gratitude to PT. Smart Tbk Padang Halaban for their invaluable support, permission to conduct research, and provision of essential information. Special thanks are also due to the lecturers for their guidance and mentorship throughout this research project.

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