



The COSO ERM Implementation Perspective Analysis on Manufacturing Company: Case Study PT Alcomex Indo

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ABSTRACT: Internal control implementation of PT Alcomex Indo, a manufacturing company focused on aluminum extrusion based on COSO ERM perspective. This research conclude that the internal control of objective settings in the expenditure cycle is not fully implemented and stated that there is no budgeting system which resulted in the lack of performance evaluation in the expenditure cycle.

KEYWORDS: COSO ERM, Expenditure Cycle, Manufacture, Production Cycle, Revenue Cycle.

INTRODUCTION

A company is established with the aim of gaining profit for shareholders or owners of the company. Over time, the company will continue to increase profits and expand its market reach. The more the company develops, the more parties will be involved in it. The increasing need for Human Resources (HR), and the diversity of products or services provided by the company will create various challenges in corporate governance. The developments that occur create the need for increasingly complex internal controls, including adjustments to organizational structures, and various methods or tools in maintaining the sustainability of the company's business processes in achieving the company's goals.

Asset protection, accuracy and fairness of recording, reliable and accurate information, conformity of financial reports, operational efficiency, compliance with applicable laws and regulations in both the internal and external environment are some of the achievements of adequate internal control (Romney, Steinbart, Summers, & Wood, 2020). Internal control is designed to prevent, detect, and correct risk that may occur in achieving the Company's objectives. The need to obtain adequate assurance in achieving the Company's objectives requires an adequate internal control system. Accuracy in selecting and designing internal control system will help the Company achieve its objectives and help minimize and mitigate risks in the Company's business processes (Accurate, 2021). The Committee of Sponsoring Organizations of the Treadway Commission (COSO) is an organization that designs internal control system guidelines to help businesses evaluate internal controls, risk management, and fraud prevention (Nugraha & Tjakrawala, 2023).

This study will discuss the implementation of the Internal Control System in the three main cycles of the Company at PT Alcomex Indo, one of the aluminum extrusion manufacturing companies in Indonesia based on the internal control system framework developed by COSO or also known as COSO Enterprise Risk Management (COSO ERM). The three main cycles consist of Revenue Cycle, Expenditure Cycle, and Production Cycle.

RESEARCH REVIEW

Agency Theory

Agency theory explains the relationship between Principal and Agent. Most Principals are not the ones who operate their own companies and prefer to hire professionals to manage their companies. When agents are given control to manage the company, they also have the right to perform tasks and make decisions including in managing the Company's risks (Gitman & Zutter, 2015).

COSO ERM

COSO is a group of professional organizations in the fields of accounting, finance, management, and auditing. COSO is dedicated to improving the quality of corporate governance, risk management, and internal control (Romney, Steinbart, Summers, & Wood, 2020). In 1992, COSO published a framework that was updated in 2013 and is known as the Internal Control-Integrated

Framework and used as a guide for the Company's internal control. In 2017, COSO again updated its framework to the Enterprise Risk Management-Integrated Framework known as COSO ERM (Jacy, 2021; Soetedjo & Sugianto, 2018).

As shown in the figure 1, The COSO ERM Framework consists of four objectives, eight internal control components, and four work units (Soetedjo & Sugianto, 2018).



Figure 1 COSO ERM Dimension

The four objectives are consisted of:

- Strategic. Establishing strategies to achieve the Company's mission and to align the Company's objectives with the Company's operational implementation.
- Operations. Utilizing the Company's resources appropriately, effectively, and efficiently in running the Company's operations.
- Reporting. Increasing accountability and reliability of reports produced by the Company so that reports can be trusted, especially for stakeholders and shareholders of the Company.
- Compliance. Ensure that the Company's operations are carried out in compliance with applicable laws and regulations.

The eight internal control components are:

- Internal Environment. The Company's internal environmental conditions include the Company's values in running its business internally, how management leads its Company, how management makes decisions, and determining the authority and responsibility of management in the Company's operations.
- Objective settings. Objectives are set before risk identification and are expected to mitigate risks that may occur in the process of achieving the Company's goals.
- Risk identification. Identification of events that may pose a risk of loss or disruption to the achievement of the Company's goals that arise from both the Company's internal and external environments. Risk identification can be done by analyzing trends, history, and projections of events that may occur in the future.
- Risk assessment. Identified risks are assessed based on the likelihood of the risk occurring and the impact that will arise from the risk that occurs, the level of risk can be categorized into low, medium, and high risk according to the assessment that has been carried out.
- Risk response. Depending on the tolerance level, the Company can determine the appropriate treatment of the risks that have been assessed, whether the risk can be avoided, reduced, faced, or shared with other parties.
- Control activities. Implementation of Company procedures and policies to ensure that risk treatment is effective and the risk mitigation process is running well.



- g. Information and Communication. Communication to each work unit related to the right communication media to provide information related to achieving the Company's goals so that each work unit is able to carry out its duties and responsibilities in accordance with the Company's goals.
- h. Monitoring. Monitoring all risk control activities to provide risk mitigation assurance and provide evaluation of risk control performance and provide space for developing risk control activities.

RESEARCH METHODS

This study applies a qualitative approach with case study method. The case study method is applied by researchers to conduct a comprehensive analysis of the phenomenon at PT Alcomex Indo through examining cases that occur at the location within the year of 2024. The focus of the research is to analyze the internal control implementation through the perspective of COSO ERM in PT Alcomex Indo. The data collection techniques used in this study are interviews, observation, and documentation.

RESULTS AND DISCUSSIONS

The Company's Overview

PT Alcomex Indo (the Company) is a family company that has been operating since 2006 and is engaged in the manufacturing of aluminum extrusions. The Board of Directors is assisted by the Company's internal control team called the Management Representative (MR) & ISO in designing the Company's Standard Operational Procedure (SOP). The Company does not have any subsidiaries. The Company's business units consist of the Administration Department, Marketing & Sales Department, IT Department, Export & Import (EXIM) Department, Purchasing Department, Human Resource and General Affairs (HRGA) Department, and Production Department. All of these departments are under the responsibility of the General Manager (GM). The following is the Company's Organizational Structure:

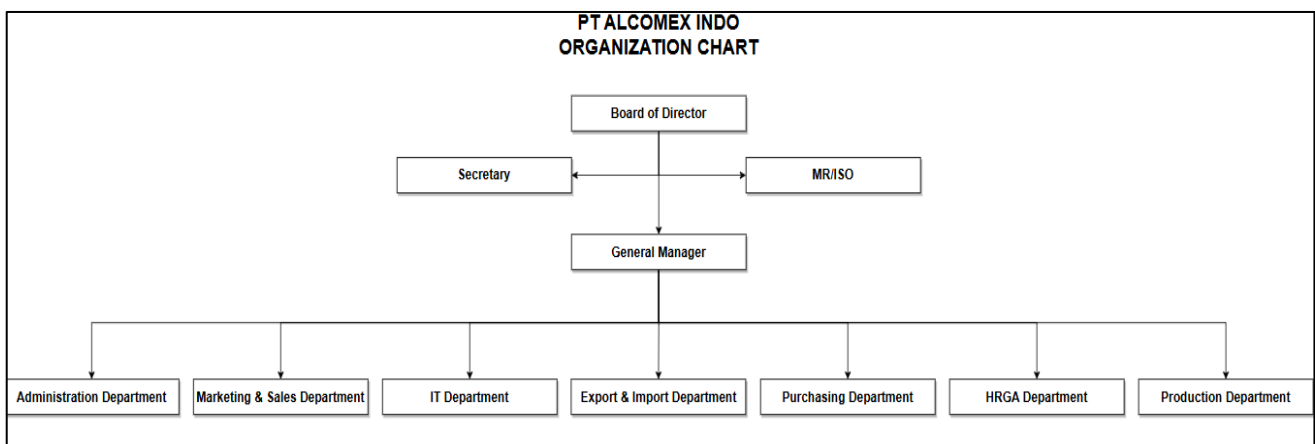


Figure 2. Organization Chart of PT Alcomex Indo

Administration Department consists of Accounting, Accounts Receivable, Tax, and Finance Division supervised by Financial Controller (FC). This section focuses on recording financial activities, preparing financial reports in accordance with applicable provisions, funding management and cash flow of the Company including payments to suppliers. The Accounting Division is led by the Head of Accounting to record all financial activities of the Company that affect the financial statements and prepare financial reports in accordance with applicable accounting provisions and ensure the adequacy of documentation for each financial transaction that occurs. The Accounts Receivable (AR) Division is led by the Head of AR to issue sales invoices in accordance with Sales Orders (SO), and Delivery Notes (DN) that have been approved by the Head of Sales and the Customers, and is responsible for the process of collecting receivables from Customers and prepares receivable reports. The Tax Division is led by the Head of Tax to ensure all Company transactions run in accordance with applicable tax regulation or policy, carry out tax reporting, and archive documentation of the Company's financial transactions. The Finance Division is led by the Head of Finance to ensure the adequacy of Company funding, receive invoices from suppliers, and prepare payments.



Marketing & Sales Department (M&S Department) led by the Head of Sales provides Company product offers to customers, negotiates in the sales process with customers, prepares SO documents, and provides services to customers for the purpose of increasing Company sales.

IT Department led by the Head of IT is responsible for providing systems to support Company operations and maintaining the Company's software and hardware.

EXIM Department led by the Head of EXIM is responsible for all of the Company's EXIM activities. This department focuses on preparing and managing documentation, taxation, customs, and transportation related to the Company's EXIM activities.

Purchasing Department led by the Head of Purchasing is responsible for preparing ordering documents in the form of Purchase Orders (PO) with the best price, quality, and delivery of goods or services and comply to the Company's needs. This department filters Purchase Requests (PP) for goods or services issued by all departments, looks for suppliers with prices, quality, and timeliness in accordance with the PP, and prepare PO.

HRGA Department is led by the Head of HR who is responsible for managing HR, taking care of Company permits and employee administration, maintaining public facilities and the Company's environment and the safety policies.

Production Department is led by the Head of Production who focuses on providing and producing finished goods for sale according to the requests given by the M&S Department. The Production Department consists of the Production Planning and Inventory Control (PPIC) Division, Warehouse Division, Remelting Division, Extrusion Division, Anodizing Division, Powder Coating Division, Packing Division, Quality Check (QC) Division, Maintenance Division, and Delivery Division, each of which is led by a Division Head.

Objectives of the Company's Internal Control

The Company has a strategic objective to become a provider of the best quality aluminum extrusion products and services for customers that meet all established performance standards, both quality and reliability and increase customer satisfaction by implementing continuous improvement programs and improving the quality of products and services.

Analysis of the Company's Internal Control Implementation Based on the COSO ERM Perspective

Revenue Cycle

The parties involved in this cycle are the Head of Sales, Head of AR, Head of Finance, Head of Accounting, FC, GM, and Director. The responsibility for internal control in this cycle lies with the Head of Accounting.

The Company's source of income comes entirely from the sale of products manufactured by the Company. Internal environmental control of this cycle can be said to be in accordance with the implementation of COSO ERM. Product sales are carried out by the M&S Department and the Company's Director, Issuance of invoices is carried out by the AR Division and authorized by the GM, Customer payment information is received by the AR Division, the Finance Division confirms proof of payment on bank account mutations, the Accounting Division records the transaction Journal, and the Head of Accounting and FC ensure the completeness of documents and the fairness of transactions

The determination of objectives for this cycle can be said to be in accordance with the implementation of COSO ERM. The strategic sales objective is targeted based on the number of shipments to customers, which is 12,000 tons per year and is divided into 1,000 tons per month. The operational objective sets the customer's receivables aging limit for a maximum of 90 days from the date of issuance of the sales invoice and the nominal limitation of the invoice based on the credit limit approved by the director. The reporting objective requires a weekly report from the AR Division to ensure that there are no bills that exceed the specified aging or nominal amount. The compliance objective requires all Company sales to comply with applicable provisions, especially tax regulations.

The risks identified in this cycle are risks of arrears in payments from Customers. M&S Department, AR Division, and Director assess the payment capability of each customer, for customers who do not have a transaction history are required to pay a deposit before the SO is issued and pay in full before delivery is made. The assessment of payment capability for customers with a transaction history is carried out by comparing the performance of the aging of receivables and the credit limit that has been set. In respond to the problem found within the aging of receivables and the credit limit of the Customer or Customer's Group, the Company will delay the delivery or reduce the credit limit to prohibiting the credit purchases of the related Customer.



The Director directly sets the standard selling price per kilogram for each product line sold by the Company starting from raw materials, Extrusion, Anodizing, and Powder Coating products. The Sales Department can provide discounts according to the volume and frequency of sales for each Customer or Customer group with the approval of the Director.

Information and communication related to sales and receivables are carried out periodically through weekly reports issued by the AR Division to the M&S Department, and Delivery Division which are monitored by the Accounting Division, FC, and GM.

Expenditure Cycle

The parties involved in this cycle are the Head of Purchasing, Head of Warehouse, Head of Finance, Head of Accounting, FC, GM, and Director. The responsibility for internal control in this cycle lies with the Head of Accounting, FC, and GM. The Company's largest expenses are capital expenditures, raw material purchases, and salary and operational expenses.

Internal environmental control of this cycle can be said to be in accordance with the implementation of COSO ERM. There is a separation of duties between purchase planning, preparation of PO, review of PO, receipt of goods or services, and receipt of invoice, and payment of Invoice.

The objective settings in this cycle from strategic objective is still not in accordance with the implementation of COSO ERM. From the strategic objective, there is no evaluation and budget setting that is appropriate to assess the effectiveness of the Company's expenditure. The operation objective of this cycle's activities is to ensure the availability and timeliness of goods or services needed to support the Company's operations. The reporting objective of this cycle is to support the Company's internal control activities. Documents related to expenditure transactions must be completed first to be checked by the Accounting Division and FC and the Finance Division prepares the payment of invoice. Compliance objective also quite supportive of the implementation of COSO ERM. This can be seen from every transaction that contains taxes that have been set in the PO such as Value Added Tax (VAT) and income tax deductions for service transactions.

The risks identified in this cycle are the risk of price changes, differences in quantities received, and receipt of fictitious goods. Price changes between PO and Supplier Invoices are reported by the Purchasing Department to FC for assessment, if the value in the Invoice exceeds the value in the PO, the previous PO will be cancelled and a new PO related to the transaction will be issued. For differences in quantities received exceeding the PO quantity, a maximum tolerance limit of five percent (5%) of the PO quantity is given and a new PO is required if it exceeds the tolerance limit, for those received less than the PO quantity, the Purchasing Department confirms with the Supplier and closes the PO if the Supplier cannot fulfill the request. The company uses CCTV to monitor the activity of receiving and issuing goods, to prevent the receipt of fictitious goods, documentation in the form of photos with timestamps is attached to each goods receipt transaction.

The Company's control activities are in line with the implementation of COSO ERM. Every PO issued is reported in a daily recap and authorized by the FC, GM, and Director. The Warehouse Division can only issue goods receipt documents if the PO is approved in the system by all authorize parties. All invoices are first checked for completeness and accuracy by the Finance Division, Accounting Division, and FC for the payment to be prepared, the completeness of the documents is in the form of PO, Receipt of Goods or Services, and Tax Invoices or Invoices from Suppliers. The Purchasing Department registers the Supplier's account and is confirmed by the FC before being used as the beneficiary account for payment. Payment can only be made by the Finance Division after all the authorization by the Head of Accounting, FC, GM, and Director are all fulfilled.

Production Cycle

The parties involved in this cycle are the Head of Production, GM, and Director. The responsibility for internal control in this cycle lies with the Head of Production and GM.

The internal environmental control in this cycle can be said to be in accordance with the implementation of COSO ERM. There is a separation of duties between administration and production.

The objective settings in this cycle are in accordance with the implementation of COSO ERM. Management sets a monthly production target of at least 1000 tons per month or at least equal to or higher than the monthly delivery target, a minimum conversion of extrusion production (recovery) of 85% of raw material usage, and a maximum of 0.5% scrap generated based on inspection by the QC Division for the entire monthly production.

The risks identified in this cycle are the risk of production errors, production failures, production miscalculations, and inventory accumulation. Production errors are generally caused by errors in SO input made by the Sales Admin. When this risk occurs, the



Head of Sales and GM will be responsible for replacing losses of at least 50% of the value of the cost of resources used in the production of the goods. Production failures can be caused by machine operator factors and the machine conditions. This risk causes a decrease in the recovery percentage and an increase in the percentage of scrap production. Scrap resulting from production failures will be reprocessed into raw materials by the Remelting Division. Production miscalculations are caused by marking of lot tickets on production machines which are still done manually, so that it can result in the mixed up of the number of production quantities between the issued lot tickets. Inventory accumulation is caused by delays in delivery due to delinquent receivables, for goods of delinquent receivables and if there is no payment or settlement from customers, the Sales Department will transfer the sale to other customers. If there are no customers interested in buying the inventory within 2 (two) years, the goods will be reprocessed into raw materials.

Control activities in this cycle depend on the lot ticket issued by the PPIC Division, the lot ticket is issued based on the SO that has been authorized by the Head of Sales and GM, PPIC requests raw materials from the Warehouse Division based on the issued lot ticket, then the lot ticket is given to the Extrusion Division to start the production process, each production result is recorded in the lot ticket and reported to the PPIC to be further given to the other Division of the Production Department related to the next production process if necessary (Anodizing Division or Powder Coating Division) until it is then submitted to the Packing Division for the Packing process of goods produced and submitted to the Warehouse division as Finished Goods. Each lot ticket with partial production results will be accompanied by an Internal DN as a supporting document to carry out the further production process without having to wait for the entire production process of a lot ticket to be completed. For each shortfall in fulfilling the SO quantity from the existing lot ticket, the PPIC will issue a follow-up lot ticket to meet the existing production shortfall.

Every production result, raw material usage, and delivery are reported in daily reports by the admin of each related Division to the Head of the related Division, Head of PPIC, and Head of Production. Daily reports are collected in weekly reports which are used as reports to the GM. Weekly reports are then collected into monthly reports to be reported to the Director. These reports are used as an assessment of the performance of the Production Department. The Accounting Division also performs stock taking procedure every month to match system records with physical inventory which then reported to the GM and Director, any differences between system records and physical count are sought for the cause together with the head of the related division and re-reconciled until the difference is less than 0.5% of the total inventory.

CONCLUSION

Based on the results of this study, it can be concluded that the implementation of the company's internal control based on the COSO ERM perspective has not been fully implemented, especially in the expenditure cycle. Internal control related to the objective settings in the expenditure cycle has not been implemented properly because there has been no budget setting to assess the performance of the expenditure cycle. This study also shows that the implementation of internal control in the sales cycle and production cycle has been implemented well but can still be developed in certain posts such as the existence of manual recording by operators on production machines used as a reference for production in the production cycle.

This study suggests that companies implement expenditure budgeting that can be based on historical expenditure transactions so that the Company's expenditure performance can be evaluated. In the production cycle, the application of digital marking on production machines that shows information on the amount and type of production as a reference for machine operators to operate so that operators do not need to write manually on production machines that allow for marking errors that end in discrepancies in the amount of production or the mixed up of lot tickets.

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