

Evaluation of Internal Control System in Cash Disbursement Cycle: Case Study of Construction Company PT XYZ

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Abstract—Construction Company PT XYZ’s actual situation based on an internal audit report shows some unusual transactions related to the cash disbursement cycle. This indicates that the company needs an adequate internal control system to provide assurance in cash disbursement transactions so that reports on cash disbursements can be fairly presented. Furthermore, if internal control is properly designed and implemented, it can prevent and detect fraud that might harm the company. This research evaluates and proposes improvement of internal control over PT XYZ’s cash disbursement cycle by using principles of the COSO framework 2013. This descriptive qualitative research is a case study observing the object of research and interviewing PT XYZ’s senior personnel. Results show that some weaknesses remain in internal control over the company’s cash disbursement cycle. In addition, this research also conducts self-control assessment and fraud analysis to determine appropriate and effective internal control in the cash disbursement cycle.

Keywords—*fraud, internal control system, cash disbursement*

I. INTRODUCTION

A. Background

Due to its complex business, costly nature, and involvement with a high number of third parties, the construction industry runs risks of internal fraud [1]. Based on a survey by the Association of Certified Fraud Examiners the most common fraud occurred in asset misappropriation, followed by Corruption and Financial Statement Fraud [2]. Furthermore, the survey also stated that the most common fraud cases of asset misappropriation were found on billing schemes in cash disbursement.

PT XYZ is an infrastructure company with core competencies in infrastructure and construction sectors, asphalt and liquefied gas (LPG) trade, precast concrete manufacturing, mechanical and electrical work, and maintenance services. PT XYZ has an internal audit unit whose activities provide assurance services and independent, objective consultations. Results of audit findings by the internal audit unit for January–September 2016 showed some unusual cash disbursement transactions, such as a payment transaction of as much as 600 million rupiah without a voucher signed by authorized project personnel, cash withdrawals totaling approximately 9 billion rupiah without complete cash transactions records, unrecognized voucher documents, duplicate voucher documents, cash-on-hand

undervalued in records, unrecorded payment notes, and late cash receipt settlements [3].

These transactions lead to the conclusion that the company’s cash disbursement cycle requires a more adequate internal control system to provide assurance in cash disbursement transactions so that financial reports can be fairly presented. Elder, Beasley, Arens, and Jusuf state that companies must develop internal controls which are capable of providing reasonable, not absolute, so that financial statements are fairly presented [4]. Furthermore, if properly designed and implemented, internal control can effectively prevent and detect fraud. The company requires design and evaluation of internal controls to improve reliability of financial statements, improve efficiency and effectiveness of operations, and comply with applicable laws and regulations.

One method to evaluate internal controls’ effectiveness is the internal control framework issued by the Committee of Sponsoring Organizations of the Threadway Commission (COSO) [5]. By using COSO’s five internal control components, this case study evaluates the internal control system and makes suggestions for the cash disbursement cycle to improve the reliability of cash accounts in financial statements at Construction Company PT XYZ.

B. Statement of Problem

Based on the previous description, this research’s problem is

- (1) Has applied to the cash disbursement cycle at PT XYZ, how good is the internal control system’s evaluation and improvement based on COSO’s internal control framework?

C. Research Objective

The objective in this research is, based on COSO’s internal control framework, to evaluate and suggest improvements to the internal control system that should be applied to the cash disbursement cycle at PT XYZ.

D. Research Contribution

- (1) This research is important because it provides benefits to PT XYZ stakeholders through suggestions regarding improvement of the internal control system of the cash disbursement cycle based on the COSO internal control framework.

- (2) This research provides knowledge for academics and for similar subsequent research, as well as a reference for academics and non-academics conducting further research.

II. LITERATURE REVIEW

A. Internal Control

Several definitions explain internal control's purpose. In the early 1990s, many people interpreted internal controls as steps taken by a business to prevent fraud, both asset misappropriation and fraudulent financial reporting. Another opinion, in addition to recognizing internal controls' importance in fraud prevention, people believe that internal control plays the same role of ensuring control over manufacturing and other processes [6]. After establishing an effective internal control system, the company can more scientifically and effectively control management of cost expenditures and can improve its entire economic profit that has huge strategic significance [7].

COSO defines internal control as a process, affected by the board of directors, management, and other personnel, designed to provide reasonable assurance regarding achievement of objectives relating to operations, reporting, and compliance [5]. Internal control by COSO Internal Control—Integrated Framework 2013 consists of five internal control components: Control Environment, Risk Assessment, Control Activities, Information and Communication, and Monitoring Activities [8].

Control environment determines an organization's nature and influences organizational members' awareness of control. The control environment is the basis for all other internal control components that provide discipline and structure.

The entity's risk assessment is a process to identify and respond to business risks. Organizations typically face a variety of threatening external and internal risks to achieving objectives of operation, financial reporting, and legal compliance.

Control activities are policies and procedures help to ensure that management directives can be implemented to address risks identified in the risk assessment process. Control activities include various activities, including approval, authorization, verification, reconciliation, review of operating performance, and segregation of duties.

Information relevant to financial reporting's purpose includes the accounting system and consists of records and procedures to initiate and authorize records, process and report entities' transactions, and maintain accountability of related assets and liabilities. Meanwhile, communication involves providing understanding of individuals' roles and responsibilities relating to internal control over financial reporting.

Monitoring activity assesses internal control's performance quality over time. In providing reasonable assurance that the entity's objectives are achieved, management must monitor controls to determine whether they operate effectively.

B. Internal Control over Cash Disbursement

Cash is a means of exchange owned by the company and ready for use in corporate transactions at any desired time [9]. Cash is the most liquid asset, and it undergoes the most frequent change because it is affected by almost every transaction with external parties. Romney and Steinbart describe internal controls over cash disbursement cycles that can be applied to each threat (Table I) [10].

TABLE I. THREATS AND CONTROLS IN THE CASH DISBURSEMENT SYSTEM

No	Threats	Controls
1	Failure to take advantage of discounts	- Invoice filled by due date for discounts - Cash flow budgets
2	Paying for items not received	- Matching all supplier invoices to supporting documents acknowledged by both receiving and inventory control - Budgets (for service) - Receipts for travel expenses - Corporate credit cards for travel expenses
3	Duplicate payments	- A complete voucher package for all payments - Paying only from original copies of supplier invoices - Cancelling all supporting documents when payment is made
4	Cash theft	- Physical security of blank checks and check-signing machine - Periodic accounting of all sequentially numbered checks by cashier - Access control to EFT terminals - Use of a dedicated computer and browser for online banking - ACH (Automated Clearing House) blocks on accounts not used for payments - Separation of check-writing function from accounts payable - Dual signatures on checks for specific amounts - Regular reconciliation of bank account by someone independent of cash disbursement procedures - Access restriction to supplier master file - Limiting the number of employees with ability to create one-time suppliers and to process invoices from one-time suppliers - Running an impress fund for petty cash - Surprise audits of the petty cash fund
5	Check alteration	- Check protection - Use of special inks and papers - "Positive Pay" arrangement with banks
6	Cash flow problems	- Cash flow budget

Source: Romney and Steinbart (2015)

C. Fraud

Elder, Beasley, Arens, and Jusuf describe at least three conditions that may cause a type of fraud called “triangle fraud” [4]:

(1) Pressure

Management or employees are under pressure to commit fraud.

(2) Opportunity

Management or employees are in a position or situation to commit fraud.

(3) Rationalization

Management or employees mentally justify the act of fraud. Mentally justifying means there is an attitude, characteristic, or set of ethical value that allows management or employees to justify such dishonest behavior.

III. RESEARCH METHODOLOGY

A. Overview

This descriptive qualitative research is a case study using an evaluation method. Stages of evaluation are to assess implementation of each control principle based on the Integrated Internal Control Framework COSO 2013. The assessment was expected to reveal weaknesses in internal controls’ implementation and suggest improvements to the internal control system in the cash disbursements cycle.

B. Types of Data

This research includes both primary and secondary data.

(1) Primary data is raw data obtained through direct observation and interview techniques for information about the internal control system’s implementation in the cash disbursement cycle. Interviews were conducted using semi-structured methods with a prepared questionnaire derived

from internal control principles. Questions then developed from the prepared questionnaire.

(2) Secondary data is processed primary data, that is, documents used in the cash disbursement cycle, such as standard operating procedures (SOPs) and other documents.

C. Research Instrument

In this research, data collection and information techniques included:

(1) Literature study

Literature study is —Conducted by reviewing legal literature, along with rules, textbooks, articles, journals, and other related documents.

(2) Field Research

Field research is —Conducted by directly collecting data and conducting research on the research object through:

a. Observation

Through observation, research data was collected for 2 months (January–February 2017). Author involvement in the process of implementing internal control was as an intern staff member in the internal audit unit which allowed authors to gather information for answering this study’s research question.

b. Interviews

To obtain deeper understanding of the internal control system’s implementation in the cash disbursement cycle at PT XYZ, the author conducted interviews with the following staff members deemed capable and authorized to provide necessary information: the head of the financial department, senior staff of the internal audit unit, debt staff, and projected cash staff.

D. Research Variables

Variables in this research are control principles based on the integrated internal control framework COSO (TableII).

TABLEII.RESEARCH VARIABLES

Component	Control Principles
Control Environment	Principle 1: Commitment to integrity and ethical values
	Principle 2: Independence from management and exercises oversight of the development and performance of internal control
	Principle 3: Establishment of structures, reporting lines, and appropriate authorities and responsibilities in pursuit of the objective
	Principle 4: Commitment to attract, develop, and retain competent individuals in alignment with objectives
	Principle 5: Individuals accountable for their internal control responsibilities in pursuit of objectives
Risk Assessment	Principle 6: Objectives with sufficient clarity to enable identification and assessment of risk relating to objectives
	Principle 7: Risk identification to achievement of the entity’s objectives and risk analysis to determine how risks should be managed
	Principle 8: Potential for fraud in assessing risks to achievement of objectives
	Principle 9: Identification and assessment of changes that could significantly impact the system of internal control
Control Activities	Principle 10: Development of control activities that contribute to mitigation of risks to achievement of objectives to acceptable levels
	Principle 11: Development of general control activities over technology to support achievement of objectives
	Principle 12: Deployment of control activities through policies that establish what is expected and procedures that put policies into action
Information and Communication	Principle 13: Relevant, quality information to support the functioning of internal control
	Principle 14: Internal communication, including objectives and responsibilities for internal control, necessary to support the functioning of internal control
	Principle 15: Communication with external parties regarding matters affecting the functioning of internal control
Monitoring Activities	Principle 16: Ongoing and/or separate evaluations to ascertain whether components of internal control are present and functioning
	Principle 17: Evaluation and communication of internal control deficiencies in a timely manner to those parties responsible for taking corrective action, including senior management and the board of directors, where appropriate

^a. Source: COSO’s Internal Control—Integrated Framework 2013

E. Company Profile

PT XYZ, a company listed in the Indonesia Stock Exchange (IDX), operates in infrastructure and building construction sectors, asphalt and liquid gas fuel (LPG) trade, precast concrete manufacturing, mechanical and electrical work, and maintenance services. It was founded in 1982, after operating for two decades as a contracting department in the parent company.

As of December 31, 2016, total assets of PT XYZ reached 4 trillion rupiah, with total net assets of 1.8 trillion rupiah [11].

Cash Disbursement Cycle

Cash disbursement for construction projects is divided into two, cash disbursement at the head office and at project sites. At the head office, cash is disbursed through a bank account on behalf of the company, is used for replenishing cash in the project bank account, paying debts to third parties (suppliers) based on agreements/contracts, and making direct voucher payments.

- (1) The project cash balance is based on standard cash requests from the project. Cash project replenishment uses the impress fund system according to the cash settlement value approved by the finance department.
- (2) Transactions which are based on agreements/contracts paid by the finance department at the head office. Supplier's invoice and billing documents can be sent to the head office or a project site. The cashier immediately prepares a billing receipt form for completed and correct billing documents. General Affairs (GA) makes a voucher document after receiving a billing receipt form. The voucher and any supporting documents (e.g., invoice, billing documents, and internal documents) are sent to the debt officer in the finance department to be processed for payment [12].
- (3) Direct voucher payment is usually made when the cash balance in the project bank account is not sufficient for payment.

Project cash is the amount transferred by the department of finance to the project's bank account through the company's bank account used for routine payment, accounted for weekly by the project, and replenished by the impress fund system. The cash balance in the project's bank account can reach 2 billion rupiah. Procedures for project cash disbursement are as follows [13]:

- (1) GA requests a project cash standard based on a cash flow budget plan made once in 3 months. GA prepares a project cash request form and submits it to the finance department at the head office for further processing. Upon request, with eligible documents approved by the head of general finance and the personnel directorate, finance prepares a check to transfer funds to the project bank account.
- (2) Payments using project cash can be made in cash or non-cash. GA is responsible for managing financial activities at the PT XYZ project site. Thus, GA must prepare a voucher for each payment based on supporting documents (e.g., invoices, internal

documents, receipts, transfer receipts) and properly record it in the expenditure table and ledgers.

- (3) Every week, GA performs the project's finance opname and cash settlement. GA closes the entire project's estimated cash book and records its final balance of cash book, bank book and temporary cash receipt book. GA also reconciles the project bank book and project cash book, transfers the giro service fee, and, monthly, sends proof of transfer to the head office. The project head examines minutes of the finance opname and supporting documents. GA then submits a project cash settlement form and supporting documents to the finance department.
- (4) The finance department receives a cash settlement form and supporting documents and checks their completeness and validity. Eligible voucher and payment documents are submitted to the head of general finance and the personnel directorate, along with the cash settlement form to be signed. Ineligible voucher and payment documents are sent back to the project to be revised as required.
- (5) The finance department prepares a check for cash replenishment based on the cash settlement value approved by the head of general finance and the personnel directorate.

IV. FINDINGS AND DISCUSSION

A. Findings

Evaluation of Internal Control Based on the COSO Framework

Evaluation of the internal control system includes 17 principles based on the COSO framework, using observation and interview methods. Each principle is discussed in the section below.

The company's integrity and ethical principles have been defined in the Code of Conduct approved by the Company's Board of Commissioners (BoC) and Board of Directors (BoD). Management periodically evaluates individual and team performance according to the Code of Conduct. Violations are processed according to level (minor, moderate, or severe). However, the Company does not have integrity pact signed by employees, particularly those involved in the cash disbursement cycle.

Research found that BoCs and BoDs show independence from management by supporting audits conducted by internal auditors. BoCs regularly review the company's internal control system and often communicated with BoDs and internal audit units in the internal control system's implementation. BoCs and BoDs have independent members to ensure objectivity in the decision-making process regarding the company's internal control.

In the third principle, research found that reporting lines are described in SOPs. However, SOPs related to the cash disbursement cycle have not been updated. In the event of a change in key personnel's responsibilities related to the cash disbursement cycle, the change is subject to approval by directors and senior management and is then communicated to interested units.

Training and development are conducted to ensure that employees involved in the business cycle have the necessary knowledge, skills, and capabilities. Management routinely conducts competency evaluations of employee and non-employee (outsourcing, interns) performance according to predetermined policies. For senior management, the company also has a competency standard that reflects the technical competencies required. The fourth principle also describes contingency plans for assignment of responsibility for internal control. However, based on interviews, management does not have a contingency plan for important assignment responsibilities related to voucher preparation. Prepared vouchers need to be signed sequentially by authorized personnel using the established system. But documents on personnel's responsibilities in creating vouchers have not been updated.

In principle 5, individual performance indicators are determined in each unit, while the HR Department determines incentives and rewards based on performance evaluation results. There are guidelines on performance measures, incentives, and rewards for each position level.

For evaluation results in principle 6, company objectives are implied in the Vision and Mission statement and in individual values in the Code of Conduct. With Vision-Mission, the company sets financial and non-financial goals. In addition, Vision-Mission illustrates the main competitive advantage and becomes a reference in formulation of the company's strategic management. Objectives prepared at the activity level are based on the company's strategic management and involve all senior management in the relevant unit.

Risk identification associated with the cash disbursement cycle has never been performed. As a result, the company never conducts a risk assessment (principle 7). The company has also never performed fraud risk identification (principle 8). As a result, the company does not have a mechanism to anticipate, identify, and act on risks arising from changes in the environment (principle 9).

In principle 10, as a result of having no risk identification and risk assessment, control activities still do not contribute to risk mitigation. Control activities consist of performance review, information processing controls, physical controls, and segregation of duties [8]. BoDs determine and evaluate key performance indicators to conduct appropriate performance assessment. Employee performance assessment indicators are based on employees' work performance, and scores are given based on their activities. Information processing control consists of general and application controls. General controls in the cash disbursement cycle include: access control and system security with restrictions on access rights to computer and SIMPro systems, including user identification such as accounts and passwords; authorization controls that restrict access to official information only; and data control such as data encryption. Application controls include: input control including validation of billing documents, completeness of documents, and verification of documents manually by the bill's recipient; processing control is performed against the possibility of errors by personnel in the Information Technology unit occurring in a computer program; and output controls in hardcopy (document filing based on

receipt date and destruction of unnecessary documents) or softcopy (control of information security transmitted from the project site to the head office and vice versa, and security on computer screens).

Physical control over projects' cash-on-hand includes securing (locking up) cash savings and controlling access to cash-on-hand and GA and project heads conducting weekly cash opnames. Physical control over project cash in the bank includes serial numbers on vouchers and physical security; recording project bankbooks daily; reconciling monthly the balance in the project bankbook with the bank statement; recording as yet unrecorded transactions in the bankbook (e.g., giro service revenue, remittance fee, administration fee of checking account, charging of check/giro book fee); reporting bank reconciliation to the treasurer in the finance department; physically protecting checks/giro at the project site, directly confirming the relevant bank before issuing a check/giro, validating check/giro with the authorized project officer's signature, and confirming with the bank cashier the funds' availability in project bank accounts. Physical control at the head office includes physical protection of check/giro and controls access for validating check/giro. The treasury, the head of the finance department, and the director must approve the check/giro. Other controls include access to buildings and facilities by guards both during and outside working hours; physically securing vouchers received and invoice receipt forms based on their dates; the Chief Financial Officer ensuring funds' availability in corporate bank accounts; use of electronic security access (fingerprints) to record employees' presence at the head office and Closed-Circuit Television (CCTV) in the building; and restrictions on access to critical device areas.

Research found that at PK XYZ, segregation of duties is still weak. This is due to the limited number of finance personnel at the project site, so some personnel still perform two or more different functions. For example, the project finance officer under GA has responsibility for recording and reconciling bank accounts so that these overlapping duties allow him to commit fraud in recording and reconciling project cash.

Control activities involving use of the SIMPro (ERP system) are not described in SOPs even though they play an important role in delivering information for the cash disbursement cycle (principle 11).

Principle 12, regarding development of control activity through policy, shows that SOPs do not explain the role of technology and information systems in the cash disbursement cycle. Problems include lack of revision since initiation; the SOP has not considered possible risks; and timeliness of control still needs improvement through employee training. Results of control evaluation determine its continued relevance, for instance control's socialization and improvement. Control improvements are always communicated via internal letter and SIMPro.

SIMPro has integrated data related to the cash disbursement cycle, such as project achievements, contracts, expenditure records, invoice receipt forms, Project Profit and Loss reports, and other financial and tax support documents for several departments (e.g., finance, accounting, Internal Audit Unit) to process into relevant information. Information inputted into the system considers timeliness, completeness,

verifiability, and preservation. Only information regarding inventory data is not accurate, so further supervision is required (principle 13).

In principle 14, the company typically uses internal letters and SIMPro to communicate changes in control or other policies. In practice, however, some employees still ignore information on SIMPro. Therefore, socialization—from the division head to employees—related to changes in control and policy still needs improvement through training. Good internal communication is also built through coordination meetings between BoDs and senior management, at least every 3 months, to discuss progress toward the company’s strategic objectives and coordinate all business units and divisions’ activities. The internal communication mechanism for employees is open; no separate communication line yet serves as a fail-safe mechanism to enable employees to communicate anonymously or confidentially.

Principle 15 discusses communication with external parties. Any external problem report can be sent to the head office for processing and will be reported to the directors for solutions. However, the company currently does not have a separate communication line that allows anonymous or confidential communications from external parties.

In principle 16, ongoing evaluations are conducted through adequate supervision, bank reconciliation, monitoring of contract value, project cash reconciliation, monitoring of settlement of project cash documents, weekly project cash opname, and monitoring of cash-on-hand. In practice, however, monitoring activities have not been effective due to weaknesses in segregation of duties. Meanwhile, separate evaluations are conducted through self-assessment, review, and audit of internal control system effectiveness as conducted by the internal audit unit. However, a baseline for ongoing and separate evaluations is currently not available. This means that no monitoring strategy includes methods to emphasize to in-charge operational personnel that they are responsible for internal control and for monitoring control activities’ effectiveness as

part of their regular duties. In addition, although according to the internal audit unit, evaluations consider existing business risks, documents related to risk-based monitoring plans and evaluation frequency are still not available.

According to the last principle, internal control’s evaluation results are written into Audit Reports and communicated to the president director. Through periodic and incidental directors’ meetings, direct communication with directors is conducted. After writing audit results, the internal audit unit requests responses and corrective action plans from the auditee. Furthermore, the internal audit unit monitors implementation of corrective action plans, as agreed upon by the auditee.

B. Discussion

Proposed Improvement of Internal Control System

- Control Environment

Improvements in the control environment can be hard or soft, as shown in Table III.

- Risk Assessment

In the risk assessment component, improvements include conducting a risk assessment and fraud risk analysis. Risk Assessment in this research is based on Implementation of Control Self-Assessment (CSA) guidelines issued by the Badan Pengawasan Keuangan dan Pembangunan (BPKP). With the CSA method, staffs are expected to participate actively in risk prevention, so that risk is a true risk [14].

Risk assessment includes identification, analysis, priority, and response. Risk identification techniques are interviews with the internal audit unit. Results of risk identification are listed in Table IV.

Risk analysis is achieved through interviews and is a step to determine an identified risk’s score by measuring the likely score and the impact score. Then risk priority is calculated by multiplying the likely score by the impact score. Results for obtained risk status are displayed in Table V.

TABLE III. CONTROL ENVIRONMENT IMPROVEMENT

Hard control	Soft control
- Create an integrity pact to be signed annually by employees.	- Management practices the Code of Conduct in daily actions and behavior.
- Make a description of Write job descriptions and employee responsibilities related to implementation of internal controls.	- Management socializes all employees to the Code of Conduct and ensures they understand its application.
- Describe internal control changes in SOPs according to the theory, criteria, and indicators of control and related laws.	

Source: Research Result

TABLE IV. RISK IDENTIFICATION

Risk Statement	Cause	Impact
Failure to take advantage of discounts	- The Cash Flow Plan and Weekly Disbursement Plan are still weak.	- Costs incurred are higher.
Payment for goods not received	- Payment without authorization - Payment is not accompanied by supporting documents.	- Costs incurred are higher. - Payment is not for obtained goods and/or services.
Duplicate payments	- The project cannot distinguish between paid and unpaid vouchers. - Duplicate vouchers	- Costs incurred are higher.
Cash theft	- Project bank account reconciliation is performed by someone who follows the cash disbursement procedure. - The cash book is not recorded in an orderly way.	- Costs incurred are higher.
Cash flow problems	- Cash in the head office bank account is simultaneously managed and used for all projects. - Project budget planning and cash flow plans are weak.	- Costs incurred are higher due to bank loan interest, - Cross-subsidy burden of income between projects.

Risk response is an organizational plan derived from results of risk assessment. Larry Hubbard categorizes risk response into four: avoiding, mitigating, transferring, and accepting the risk [14].

Fraud risk can be categorized into three conditions termed the “fraud triangle,” as shown in Table VI.

- Control Activities

Categories listed in Table VII are commonly used in control activities.

TABLE V. RISK STATUS ASSESSMENT

No	Risk Statement	Likely Score	Impact Score	Total (3x4)	Risk Status
1	2	3	4	5	
1	Failure to take advantage of discounts	2	2	4	Low
2	Payment for goods not received	2	2	4	Low
3	Duplicate payments	2	2	4	Low
4	Cash theft	2	2	4	Low
5	Cash flow problems	3	3	9	High

Source: Research Result

TABLE VI. IDENTIFICATION OF FRAUD RISK

Risk Factors
Pressure - Alignment between work pressure and incentives and bonuses does not meet employees’ expectations. - Employees receive pressure from their families about lifestyle, medical expenses, and personal debt. - Relationships between employees and management are not harmonious, thus motivating employees to commit fraud.
Opportunity - Conflict between personal/family interests and company interests (family relations or similar business). - Inadequate control in the cash disbursement cycle provides opportunities for employees to commit fraud.
Rationalization - Ignoring the importance of risk identification and assessment in the cash disbursement cycle. - Not reviewing and updating the cash disbursement cycle’s SOPs. - Management and employees lack understanding of the Code of Conduct. - Management and employees do not understand their duties and responsibilities in the internal control system of the cash disbursement cycle.

Source: Research Results

TABLE VII. CONTROL ACTIVITIES IMPROVEMENT

Categories	
1	Establishment of Responsibility (Authorization and Approval)
	- Establishment of responsibility toward cash in the company’s bank account at the head office to prevent cash flow problems. Currently, the staff member in-charge of ensuring availability of funds in the company’s bank account is the Chief Financial Officer. However, if necessary, the Chief Financial Officer may be accompanied by other personnel, considering PT XYZ is involved in a multibillion-dollar project with dense daily cash inflows and outflows every week. - Companies should have a written document describing its personnel composition under General Affairs, along with details of tasks and responsibilities at the project site.
2	Verification
	- Management determines what activities need to be verified, based on the underlying process’s inherent risk. Management also needs to communicate clearly and document these decisions in the procedure. The employee responsible for verification should be required to document that this activity did occur.
3	Documentation
	- Management needs to review old or not updated SOPs in accordance with the company’s (current) activities. - Archiving vendor invoices in accordance with the due date so that the company can obtain discount benefits from vendors.
4	Supervision
	- Those responsible for supervision should: a. Delegate tasks and ask staff responsible for major control activities, b. Establish written procedures for completing tasks, c. Systematically review and evaluate each staff member’s work, d. Approve work on key points to ensure quality and accuracy, e. Provide guidance and training when necessary, f. Supervise review of documents (e.g., preliminary work).
5	Segregation of duties
	- In a project site with a limited number of financial personnel, personnel at the head office need to be involved in reviewing and approving transactions, reports, and reconciliations.
6	Access Security
	- Management must secure departmental equipment, information, cash storage, checks, documents, and other resources that might be misused, damaged, or stolen. - Management needs to review periodically access to the SIMPro system to ensure appropriate employee access based on their duties.
7	Reporting
	- Management needs to ensure that reporting staff understand reporting tasks and procedures.

TABLE VIII. INFORMATION AND COMMUNICATION RELATIONSHIPS

	Information	Communication
Control Environment	Document of Code of Conduct and integrity pact	Management communicates integrity and ethics values in meetings, discussions, and by example in everyday activities. Employees also sign an integrity pact to ensure that they understand their duties and responsibilities.
	Written documents regarding employee responsibilities related to implementation of internal controls and contingency plans for assignment	Management provides understanding to employees regarding responsibility of implementation of internal control through discussions and corporate information systems.
	Standard procedure of cash disbursement	Management conducts socialization and training for employees regarding cash disbursement.
Risk Assessment	Guidelines for identification and risk assessment	ManagementIn meetings, management conducts discussions of risk identification and assessment.
Control Activities	Written guidelines on standard procedures of cash disbursement and the amendments	Management conducts socialization and training for employees regarding standard procedures of cash disbursement and amendments.
	Written document on employee duties and responsibilities in the cash disbursement cycle	Management socializes employees involved in the cycle.
Monitoring	Written document on monitoring method	Interviews with personnel in-charge of the internal control evaluation process.
	Written document on coverage plan and frequency of evaluation based on risk	Interviews with staff involved in the cash disbursement cycle when conducting the evaluation process.

Source: Research Result

TABLE IX. MONITORING IMPROVEMENT

Monitoring
- Establishing a monitoring strategy that includes methods to emphasize to operational and program personnel in-charge that they are responsible for internal control and monitoring control activities' effectiveness.
- Examination of monitoring activities by comparing activity information with information obtained from the information system and following up all inaccuracies or other issues.
- Designing and implementing monitoring procedures that focus on persuasive information such as risk significance, timeframe since the last control was evaluated, controls in areas with high personnel change rates, and effectiveness of the follow-up process.

Source: Research Result

• Information and Communication

Information and communication components within the COSO framework are not independent, but are related to other components, as described in Table VII.

One weakness identified in the information and communication component is lack of a fail-safe mechanism to allow for anonymous or confidential communication. Suggestions for improvement are to create a whistleblower hotline for use by internal and external parties, along with guidelines on the whistleblowing system.

• Monitoring Activities

Table VIII displays improvements to the monitoring component.

V. CONCLUSION AND SUGGESTIONS

A. Conclusion

The following conclusions were obtained in this research.

- Weaknesses in the control environment include lack of an integrity pact related to the employee code of ethics; the SOP has not been updated; and the contingency plan for assigning important responsibilities related to internal control's implementation has not been documented.

- In the risk assessment component, identified weaknesses are *lack* of the following: written documents on risk identification and assessment; a method for conducting risk assessments; fraud risk identification; and documentation of mechanisms to manage risk during change. Results of risk analysis in the risk assessment reveals one "high" risk—a cash flow problem; others are "low" risks—failure to take advantage of discounts due to delayed payments, payments on unacceptable items, duplicate payments, and cash theft.
 - Control activities' weaknesses: Risk mitigation has not been considered; the SOP has not been updated; the SOP has not explained the roles of technology and the information system.
 - Information and communication weaknesses: Socialization related to internal controls still needs improvement; no separate communication lines exist for anonymous/confidential communication.
 - Monitoring weaknesses: No monitoring strategies include methods emphasizing to in-charge operational personnel that they are responsible for internal control and for monitoring the control activities' effectiveness; no written document exists on plans and frequency of evaluation based on risk.

B. Research Limitations

This research has limitations not covered in the evaluation, listed below:

- Evaluation of internal control focused only on the cash disbursement cycle for construction projects at PT XYZ.
- Since this research uses the interview method, there is subjectivity.
- The risk assessment process in this study is based on BPKP CSA guidelines established under the five-element COSO framework. In addition, CSA was not accompanied by certified facilitators.

C. Suggestions

Suggestions to interested PT XYZ parties include:

- Improvements in aspects of hard and soft control
- Writing a guideline for risk assessment, conducting risk assessment accompanied by a certified facilitator, and updating guidelines in case of the company's significant internal and external changes
- Establishing responsibility, determining types of activities to be verified and documented in the SOP; documentation, supervision, improving segregation of duties, periodically reviewing access security, and ensuring effective reporting.
- Improving socialization regarding changes to the internal control system; considering initiation of a fail-safe communication mechanism to enable anonymous or confidential communications, for example, a whistleblower hotline.
- Establishing monitoring strategies; monitoring control activities by comparing activity information with information obtained from information systems; and designing and implementing monitoring focused on persuasive information.

The suggestion for academics and future researchers is that this study research can exemplify evaluation of the internal control system by using COSO guidelines. Internal Control Systems owned by the company may vary so that development of evaluation methods should be flexible and might be adopted by other, similar companies. In addition, further research is expected to extend the scope of this research, not only for the cash disbursement cycle, but also for other business cycles.

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