PURCHASE INFORMATION SYSTEM EVALUATION AT PT. BIS

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Abstract— **this research aim is to evaluate the purchase information systems that running on PT.BIS. The data gathered in this research, which use COSO framework, carried within three departments, namely the purchasing, IT and supplies department. Each department covers respondents, which was department heads and staff. The result for evaluation of the system purchase information on PT.BIS is the identification risks within internal control that are presents in the form of findings and recommendations. The conclusion, internal controls on PT.BIS has not yet complies to accordance with the COSO framework.**

Keywords- Internal Control, Purchasing, Inventory and COSO framework.

I. INTRODUCTION

One of the critical information systems purpose for companies, in particular the trading company is to be able managing the purchase and inventory that holds. The purchase and inventory management defined as the continuation of the process of planning, management and inventory control, which aims to minimize inventory investment in order balancing demand and supply.

Internal control is a series of actions that covers the entire process in an organization involving directors, management and other personnel designed to provide assurance on the effectiveness and efficiency of operations, reliability of financial reporting and compliance with applicable regulations.

PT. BIS is a distributor of medical equipment. The company has an application that integrates a variety of systems, including inventory systems. The inventory system utilize by the warehouse, were to manage the flow of goods in warehouse turnover. There are findings in the system inventory information to various constraints, such as many variations of goods, entering and exiting the warehouse without permit. There are some products went into the warehouse without proper documents; this can complicate the warehouse in putting data into the stock card.

The scope of this evaluation only related to the purchase and inventory information system, in particular;

Evaluate purchase of business process that runs on the company. Analysis and evaluation of the system in purchase system. The utilization of COSO internal control addressed to the head and staff of supplies, purchasing and IT department at PT. BIS.

The purpose of this study is; identifying the problem contained in the purchase information system using COSO through interviews. Evaluate purchase information systems at PT. BIS. And provide recommendations to remedy deficiencies that found during evaluation.

II. THEORY

The purchase is the activity of the source selection, ordering and procurement of goods and services as one of the main activities of the company's business operations (Heripracoyo, 2009). According to Nasution (2010, p2), the purchase is a joint procurement of goods or services in order to be used for self-supporting, for the sake of the production process or for resale.

According Hendarti, Husni and Tandra (2010, p2), the evaluation is a systematic process that resulted useful information to assess the success and efficiency of a program or an alternative decision. According to Weber in Husni, karmawan, and Haris (2010, p2), auditing information systems can be broadly defined as the process of collecting and evaluating evidence - evidence to determine whether a computer system protect the company's assets, maintain data integrity and enables organizations to aim effectively achieved with the resources efficiently.

According to ISACA 2013 (2013, p9) there are 16 audit standards. The standards are Audit Charter, Independency that consists of Professional independence and Organizational independence. Professional Ethics and Standards, Professional Competence, Planning, Performance of Audit Work that includes; Supervision, Audit Evidence, and Documents, Reporting, Follow Up Activities, Irregularities and Illegal Acts, IT – Governance, Use of Risk Assessment in Audit Planning, Audit Materiality, Using the Work of Other Experts, Audit Evidence, IT Controls and E – Commerce.

According to Arens, Elder and Beasley (2012, p341) internal control is a process designed to provide reasonable assurance regarding the achievement of management objectives. Bodnar and Hopwood (2010,

p12) state that internal control is advised decision-making in an organization in making regulations and guide the activities of the company. According COSO (2011, p1), internal control is a process, affected by an entity's board of directors, management and other staff, designed to provide reasonable assurance of achieving the goal.

According to Arens, Elder and Beasley (2012, p341) there are three internal control purposes; Reliability of financial reporting, Efficiency and effectiveness of operation and Compliance with laws and regulation.

Whereas according COSO (2011, p1), the purpose of internal control are; Activities that effective and efficient, Reliability in reporting and Compliance to laws and regulations.

It is important for a corporate to comply with one standard of internal control within its information system. If the company information system internal control, comply with the standard, it give assurance to the stakeholder that the information system is utilize with it most optimal function.

III. PT. BIS

PT. BIS is a trading and service company in the field of hospital and laboratory equipments, Chemical, and general scientific supply prepared with the support of experts from various disciplines. PT. BIS involved in efforts to improve public health through the provision of medical equipment and supplies.

Form of organizational structure depends on the purpose and operation of the company. The organizational structure is a tool in achieving corporate goals with the organizational structure in which it will create cooperation between parts of the organization in achieving its goals. The organizational structure must have a flexible state. In addition, adjustments may happen without having to change the structure of the company as a whole. The organizational structures of the PT. BIS are as follows:
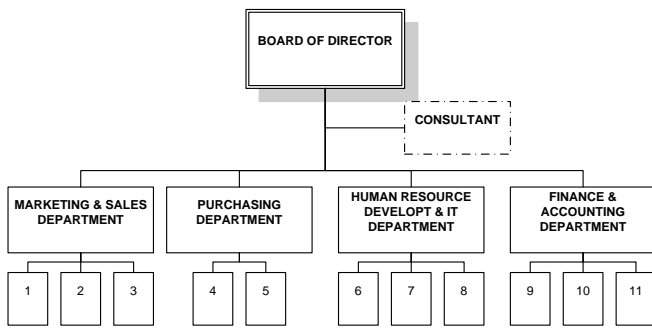

Figure 1. PT. BIS Organization Structure

Application of information systems and inventory purchases is an application that can integrate several parts, including purchasing department and warehouse at PT. BIS in the process of purchase and supply of goods. Database associated with the purchasing process and

supplies located on two servers. Each section has a different access rights to be able to display or enter data. In the running application, needed hardware, software, network support and inventory purchases.

Internal Purchasing Process

The process begins when a department, purchases contacted the supplier to request a quote, pricing, and period requirements and return goods. Having reached an agreement with the supplier, than fill departments X Request Form or Purchase of Goods Purchase Requisition (PR) along with the identity of the supplier (name, address, telephone number) which then be submitted to the relevant department head for signature. The next PR submitted to the director for approval requested. PR then given to the purchasing department to be made a Purchase Order (PO) and PO listings, PO subsequently given to the accounting department for signatures and PO listing given to the warehouse after it is signed by the head of the purchasing department. PO that signed by the accounting department returned to the department a copy of the purchase to be made to the supplier, the cashier and archived by the purchasing department.

Goods, Invoice and Letter received Warehouses listings matched with PO. After the Letter of goods in compliance with the listed PO listings, than will update the number of warehouse inventory to Goods Received Note on application and perform archiving PO VISISOFT listing. Note and Invoice going to the warehouse liability section for calculation of the due date and the total debt on the card debt. Proof of liability section makes Expenditures Cash (CPC) based on the invoice and due date as agreed by the company and suppliers. Part CPC to submit debt accounting department for signatures than goes to the cashier for payment then cashier gets receipt of payment from the supplier and finally archived.
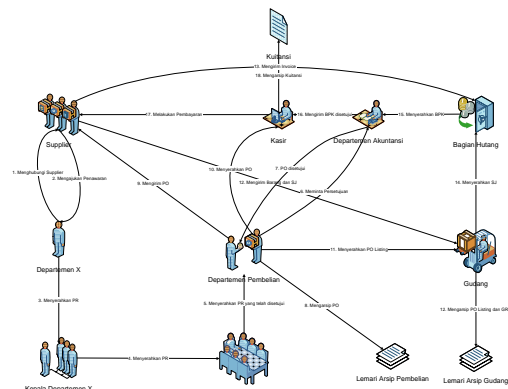

Figure 2. Internal Purchasing Process

External Purchasing Process

Buying process begins when purchasing department contacted the warehouse to check inventory in the warehouse. Warehouse check inventory and then confirm to the purchasing department, if the stock of goods in the

warehouse stock is less than the minimum purchasing department will make the PO and PO listing. PO that made given to the general manager and the accounting department for signature. PO that signed by the accounting department returned to the purchasing department in the archives and made a copy given to the supplier and the cashier. PO listings that signed by the head of the purchasing department will then given to the warehouse. Suppliers deliver goods and invoice while the letter delivered straight to debt department. Warehouse will match the incoming goods to PO listing, if the goods are in accordance with the PO listings warehouse will perform archiving listings PO Receive Goods Note and input as well as sending a letter to the debt part. Proof of liability section makes Expenditures Cash (CPC) based on the invoice and due date as agreed by the company and suppliers. CPC has signed the accounting department subsequently given to the cashier as a basis for payment. After the payment received, the form of receipts filed at the checkout.
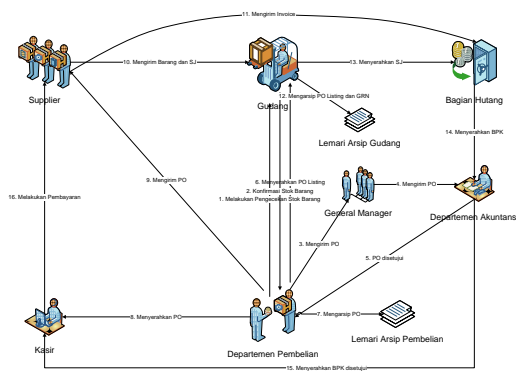
Figure 3. External Purchasing Process

IV. DISCUSSION

Table 1. Risk Finding and Recommendation

Component	Principle	Condition of the Company	Risk	Recommendation
Environmental Control	Value Ethics and Integrity	Purchasing department has a relationship with the supplier, which raised the risk of inflation of goods prices.

Goods price mark-up possibility.

Placing goods that do not meet the standards that damaging and complicate the process for finding | Fire

Loss company

Search the inventory of goods difficult. | Provide hydrant in the area of warehouse

Using barcode system

Tightening authorize each purchase transacti |
| | | stuff.

Employee still smoke around the warehouse. | | on. |
| Exercise Oversight Responsibility for Internal Control | | New employees do not know how to create a PO because there is no set procedure

Damaged goods can be inputted into the Goods receive note because employees do not know the mechanism of checking the goods | PO is not made in accordance with PR

Disappointed customers because the goods were shipped defective goods | QUOTE employee seminars on internal controls

Provide guidance during the meeting on the importance of internal controls on goods checker mechanism |
| Determining the Structure, Powers and Responsibilities | | Companies do not have written policies and procedures are adequate to monitor every transaction authorization and approval. | Possibility of price *mark-ups* | Each transaction made SOP (Standard Operating Company) to control transactions. |
| Commitment to competence | | Companies have not done related to policy evaluation and appropriate action to mapping problem that reflects the company's competence. | Takes time when searching items. | Making grouping items by type of item. |
| Enforcing Accountability | | Companies not enforce employee accountability in the purchasing department and inventory | Employee performance disrupted by the division of tasks and | Creating a standard qualifying employees

Provide |

			responsibilities is not appropriate	incentives or rewards that employees are encouraged to work well
Risk Assessment	**Setting Goals**	Strategies applied by the company at this time have helped in achieving the targets in each department.	-	-
	Identify and Analyze Risks	Company is not reach optimum condition in the identification and analysis of risks and the outcome not well documented. Emerging issues beyond risk mapping has done.	In the sample inventory can get out without a permit	Archiving is done on the identification and analysis of risks
	Fraud Risk Assessment	The Company has assessed the causes and opportunities for fraud over 1 year evaluation.	Cheating keeps growing because the evaluation timeframe is too long and not timely.	Evaluation accelerated at least 3 months period.
	Identifying and Analyzing Changes	The Company has identified and analyzed everything about external parties, changes in purchasing and inventory department and report it on the board.	-	-
Control Activities	**Selecting and Developing Control Activities**	Company employees can send data via email. Firm understanding of control activities but to issues causing the control process is not going well.	Release of company internal data	Companies making special company email for Employees
	Selecting and	The selection and supervision of the	Permission is not	Perform software
	Developing Against Public Surveillance Technology	development of technology has made by the IT department	applicable by the authorities. The process of converting data into information is not going well. Hardware and software malfunction.	and hardware upgrades. Perform regular maintenance
	Implement Policies and Procedures	The companies Procedures and policies have not done right. The evidence shows, warehouse department does not make the goods check and inputted correctly into application.	Employee resigned. Losses on the company due to the existing procedures do not run properly.	Provide sanctions for procedures and policies are not implemented Evaluate the running processes.
Information and Communication	**Using Relevant Information**	Information has not properly managed. Supplies department received the letter and subsequent PO matched with items received.	There are vulnerable data stolen by irresponsible parties. When matching PO information and SJ, warehouse department made inaccurate input data.	Use data encryption for protective action. Apply the latest technology of surveillance for in and out of the data.

	Internal Communications	Communication in each division through the meeting went well.	-	-
	External Communications	Communications with external parties go well with analyzing any suggestions received.	-	-
Activity Monitoring	Evaluation of Sustainable doing or Separated	When the data entered, there should monitoring activity.	Could allow damaged to data that input in receive note.	Check the rules before enter the data into receive note
	Evaluating and Communicating Disadvantages	Each department head has evaluated and give report through meetings.	-	-

Figure 4. Purchase Consolidation (Internal and External)

The process begins when a department purchases X make requisition (PR) given to the department head for approval. PR approved by the department head and then submitted to the director for signature. PR subsequently forwarded to the purchasing department. Purchasing department to identify the supplier and ask for the availability of goods, after the supplier will inform availability of goods to the purchasing department. Purchasing department made a Purchase Order (PO) and PO Listing. PO then submitted to the accounting department for signed and the department made copy three times, the first copies to suppliers, cashier and archived in the purchasing department. PO Listing submitted to the barn to match the items received with the goods ordered. Suppliers deliver goods to warehouses along the letter and invoice to the liability section. When the warehouse receipt and packing slip matched with PO Listing, and if the quantity of goods in accordance with the PO Listing archived by the warehouse, the letter forwarded to the debt section. Proof of liability section then make Cash Expenditure (CPC) based on the invoice price of the goods and the agreement. CPC subsequently forwarded to the accounting department for approval and forwarded to the cashier that made payments to suppliers

In consolidation with the external process, the buying process begins when purchasing department asked the warehouse inventory, if less than the minimum inventory warehouse stock then asked the purchasing department to make a purchase. Purchasing department then identify the supplier, if the supplier has determined later purchasing department will make a Purchase Order (PO) and PO listing. PO created than submitted to the accounting department for questioning approval, once approved PO returned to the purchasing department for a copy of the PO made 3 times that given to the supplier, the cashier and archived in the purchasing department. PO listing sent to the warehouse to match the items received with the goods ordered. Suppliers deliver goods and delivery orders directly to the warehouse while the invoice submitted to the debt part. Goods and delivery orders entered into the warehouse listings matched with PO, if the amount of goods entering listings are in accordance with the PO, PO warehouse will archive listings and forward the letter to the debt part. Part Debt Proof Cash Expenditures made by invoice and price agreements with suppliers, CPC then submitted to the accounting department for approval and signature. CPC signed subsequently given to the cashier for payment made to supplier. The cashier makes payments based on the received PO and CPC

V. CONCLUSION

Based on the evaluation done towards the purchase of information systems at PT. BIS using the COSO, it can be conclude following components:
1. Environmental Control
   Environmental control on the purchasing department information system still has many problems, especially the effort to stop mark- up purchase price, resulting in low employee accountability thus the employee performance.
2. Risk Assessment
   Risk assessment information system done when the purchasing department has been running quite well; it is evident from the risk assessment conducted by external entity.
3. Control activities

Control activities in the purchasing department is still possible fraud, especially the problem of leakage of corporate data on a third party to use E - mail.

4. Communication and Information

Internal communications are conducted by the purchasing department is through a meeting attended by the director, general manager, and head of the department, while the communication with external parties is done by accepting any suggestions and feedback that is given by an external party. Use of information systems in both departments is already underway.

5. Activity Monitoring

Monitoring activities conducted by the purchasing department conducted using applications where control measures undertaken, have weaknesses because surveillance done

when the data has been entered into the application.

Based on the evaluation there a few suggestions purposed:

1. Departments other than purchase department prohibited to contact the supplier to avoid the risk of mark-up the price of goods.
2. Employee responsibilities related to internal control should improved by providing training related to internal control.
3. Should there agenda to mapping problem regularly so that problems may occur could be detected.
4. Apply a mechanism that can detect incoming release of the company's data.
5. Supervision of data entry tightened.
6. Create Standard Operating Procedures (SOP) to control transactions.

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