CHAPTER II

THEORETICAL FRAMEWORK

2.1. System

According to Anthony and Govindarajan (2007) a system is a prescribed and usually repetitious way of carrying out an activity or set an activities. According to Romney and Steinbart (2012) a system is a set two or more interrelated components that interact to achieve a goal. According to Hall (2008) a system is a group of two or more interrelated components or subsystems that serve a common purpose.

The opinions above explain which system are same, from the definition of system above can be concluded that system is network procedures related each other to fulfill the goal of company. The system also has several element covering, According to Hall (2008) there are three elements;

1. Multiple Components. A system must contain more than one part.

2. Relatedness. A common purpose relates the multiple parts of the system. Although each part functions independently of the others, all parts serve a common objective. If a particular component does not contribute to the common goal, then it is not part of the system. For instance, a pair of ice skates and a volleyball net are both components. They lack a common purpose, however, and thus do not form a system.
3. Purpose. A system must serve at least one purpose, but it may serve several. Whether a system provides a measure of time, electrical power, or information, serving a purpose is its fundamental justification. When a system ceases to serve a purpose, it should be replaced.

2.2. Control

According to Anthony and Govindarajan (2007) control are devices should be placed to ensure that its strategic intentions are achieved. Furthermore, Anthony and Govindarajan stated that every control system has at least four elements:

1. A detector or sensor: a device that measures what is actually happening in the process being controlled.
2. An assessor: a device that determines the significance of what is actually happening by comparing it with some standard or expectation of what should happen.
3. An effector: a device that alters behaviour if the assessor indicates need to do so.
4. A communications network: device that transmit information between the detector and the assessor and between the assessor and effector.

2.3. Internal Control System

2.3.1. The Definition of Internal Control Systems

According to Widjajanto (2001) internal control is a control system that include organizational structure with all methods and size in company. According
to Romney and Steinbart (2012) internal control is the process implemented to provide reasonable assurance that the following control objectives. According to Mulyadi (2008), the definition of internal control systems includes the organizational structure, methods and measurement coordinated to keep the wealth of the organization, check the accuracy and reliability of accounting data, push efficiency and encourage compliance with management policies. Committee of Sponsoring Organizations (COSO) in September 1992 defines internal control as (Tunggal 2014), a process, effected by an entity’s board of directors, management and other personnel, designed to provide reasonable assurance regarding the achievement of objectives in the following categories:

1. Effectiveness and efficiency of operations.
2. Reliability of financial reporting.
3. Compliance with applicable laws and regulations.

The opinions above can be concluded which the internal control system is an organizational plans include organizational structures, methods, policies, practices and procedures in order to achieve the goal. Internal control also provide accurate information, improve effective and efficiency of company, and improve the obedient over law and policy.

2.3.2. The Objective of Internal Control Systems

Internal control in company is a tools that help head officer do the task, such as maintaining the security of company property, checking the accuracy and correctness of accounting data, promoting operation efficiency, and assisting in
maintaining the compliance of predetermined management policies. Efficiency and effective must improved in order to prevent fraud and error. According to AICPA, in Hall (2008) the internal control system comprises policies, practices, and procedures employed by the organization to achieve four board objectives:

1. To safeguard assets of the firm.

2. To ensure the accuracy and reliability of accounting records and information.

3. To promote efficiency in the firm’s operations.

4. To measure compliance with management’s prescribed policies and procedures.

Inherent in these control objectives are four modifying assumptions that guide designers and auditors of internal controls.

a. Management Responsibility. This concept holds that the establishment and maintenance of a system of internal control is a management responsibility.

b. Reasonable Assurance. The internal control system should provide reasonable assurance that the four broad objectives of internal control are met in a cost-effective manner. This means that no system of internal control is perfect and the cost of achieving improved control should not outweigh its benefits.
c. Methods of Data Processing. Internal controls should achieve the four broad objectives regardless of the data processing method used. The control techniques used to achieve these objectives will, however, vary with different types of technology.

d. Limitations. Every system of internal control has limitations on its effectiveness. These include (1) the possibility of error—no system is perfect, (2) circumvention—personnel may circumvent the system through collusion or other means, (3) management override—management is in a position to override control procedures by personally distorting transactions or by directing a subordinate to do so, and (4) changing conditions—conditions may change over time so that existing controls may become ineffectual.

2.3.3. Step of Internal Control Systems

There are several steps that can be done in the process of internal control, according to Willson (1986) stated that there are three step in the evaluation of internal control systems, that are:

1. Identifying the main activities, the risk and the possibility of conceding in each operating components of the company and formulate the control objectives in relation to these activities.

2. Outlining (with flowchart) and understand sharing system used in the processing of transactions - transactions, protect company assets and prepare financial accounting reports.
3. Finally, evaluating the system, with special attention to an important weaknesses that may be found, to ensure that these systems provide reasonable certainty that the control objectives may be achieved.

By using these measures, the company can know the situation in the company and give an overview of something that will happen in the future.

2.3.4. Elements of Internal Control System

The concept of internal control structure is based on management responsibility. Internal control structure should be establish and organize well, Internal control must require the establishment of responsibilities with an organization. Internal control also requires the maintenance of adequate records in an effort to control the asset and analyze the assignment of responsibility.

Elements of internal control according COSO (Tunggal, 2014) consist of five interrelated elements:

1. The control environment. Set the tone of organization, and influences the control consciousness of its people. It is the foundation for all other components of internal control, providing discipline and structure.

2. Risk assessment. The entity identifies and analyze the relevant risks to achieve objectives, and forms a basis for determining how the risks should be managed.

3. Control activities. The policies and procedures help to ensure that management directives are carried out.
4. Information and communication. The identification, capture, and exchange of information in a form and time frame that enable people to carry out their responsibilities.

5. Monitoring. Process that assesses the quality of internal control performance over time.

2.3.5. Characteristics of Strong Internal Control

Strong internal control system is if the people in the company do not make mistakes including system fault, accounting errors, or fraud. Internal control can be effective if it is able apply the elements of internal control. According to Baridwan (2002), there are four characteristics: an organization structure which divide the responsibilities appropriately., an authority or job description are useful, also accounting procedures which are useful to implement accounting controls on property, debts, income and expenses., health practices run in every part of the organization and capability of employees in accordance with their responsibilities.

Strong internal control influences the organizational structure, which separates the function responsibility explicitly. In organizations, each transaction only happened depends on authorization from the officer. Furthermore, employees with quality with responsibility in the implementation of the tasks and functions of each organizational unit will create healthy practices. The division of functional responsibilities and authority systems and recording procedures that
have been set will not be done well if not created ways to ensure healthy practices in implementation.

2.3.6. The Parties In Charge of the Internal Control System

Everyone in the organization is responsible for the internal control system. Besides outside parties, such as independent auditors and regulatory agencies can help organizations by providing useful information for management implement internal control within the organization. An outsider is not responsible for the effectiveness and not part of an organization's internal control system.

According Mulyadi (2008). The parties responsible for the internal control system are:

1. Management
   Management is responsible for developing and conducting effective internal control system of the organization. Not the auditor who is responsible for the presentation of financial statements in accordance with generally accepted accounting principles.

2. The Board of Commissioners and the audit committee
   Commissioners and the audit committee is responsible for determining whether the management meet their responsibilities in developing and conducting internal control system.

3. Internal auditor
   The auditor is responsible for checking evaluate the adequacy of the entity's internal control systems and making improvement
recommendations. The internal auditor is not the main party responsible for the internal control system.

4. Other personnel entity

Roles and responsibility all other personnel is to provide information or uses the information generated by the internal control system to be established and communicated well.

5. Independent auditor

As part of its audit procedures on the financial statements, the auditor may find weakness of his client's internal control system, so that he can communicate the audit findings to management, the audit committee, or board of commissioners.

6. Other outside parties

Other outside parties responsible for the internal control system are the regulatory body such as Bank Indonesia and Bapepam. This regulatory agencies issue a minimum internal control requirements that must be met by an entity and the entity to monitor compliance with these requirements.

2.3.7. Limitation of Internal Control

Inadequate internal control would cause a threat to assets and quality information company (Wilkinson :2000), risk exposure caused consist of:

1. Unintentional error

Unintentional error causes employees poorly trained or poorly supervised, or tired and inattentive.
2. Deliberate error

These errors include fraud, acts of deception to cover misconduct or dishonesty.

3. Unintentional loss assets

Assets can be lost or misplaced by accident. Assets lost can be either physical assets and data.

4. Theft of assets

The company's assets can be stolen by outsiders or by employees company. Usually these employees have gained the confidence to take care. Employees often abuse or deliberately mistakes to cover up his actions.

5. Security error

Security error or breaches are usually done by people who do not entitled but can access archived data or assets of the company.

6. Criminality and natural disasters

Act of violence can cause losses in assets company, including data. If serious enough, this violence can stop the business operations and even drop the company into bankruptcy. Similar to natural disasters, big losses as well can occur due to natural disasters.

2.4. Revenue Cycle

According to Hall (2008) Economic enterprises, both for-profit and not-for-profit, generate revenues through business processes that constitute their revenue cycle. In its simplest form, the revenue cycle is the direct exchange of finished
goods or services for cash in a single transaction between a seller and a buyer. This time lag splits the revenue transaction into two phases: (1) the physical phase, involving the transfer of assets or services from the seller to the buyer; and (2) the financial phase, involving the receipt of cash by the seller in payment of the account receivable. As a matter of processing convenience, most firms treat each phase as a separate transaction. Hence, the revenue cycle actually consists of two major subsystems: (1) the sales order processing subsystem and (2) the cash receipts subsystem. Furthermore, according to Wilkinson (2000) revenue cycle is one of the principal transaction-oriented cycle that interfaces with and provides key input to the general ledger and financial reporting system.

The opinions above can be concluded revenue cycle is set of business activities which facilitate the exchange of products or services with cash.

2.4.1. The Objective of Revenue Cycle

An organization’s should be designed to maximize the efficiency and effectiveness of its revenue activities. According to Wilkinson (2000) the main purpose of the revenue cycle is facilitate the exchange of products or goods or services to the consumer or buyer to obtain money or cash. However, the specific objectives of the revenue cycle are: (1) Recording sales order correctly and accurately. (2) Verifying buyer deserve to do credit. (3) Delivering products or services on the agreed date. (4) Collecting the cost of the product or goods or services in accordance the time and accurately. (5) Recording and classifying cash receipts accurately. (6) Posting sales and cash receipts into account purchase right
in the accounts receivable ledger. (7) Securing until the product or goods or services delivery. (8) Securing cash or money until the cash or money delivery.

2.4.2. Procedure of Sales Order

According to Hall (2008), sales order procedures include the tasks involved in receiving and processing a customer order, filling the order and shipping products to the customer, billing the customer at the proper time, and correctly accounting for the transaction.

1. Receive order

The sales process begins with the receipt of a customer order indicating the type and quantity of merchandise desired. At this point, the customer order is not in a standard format and may or may not be a physical document. Orders may arrive by mail, by telephone, or from a field representative who visited the customer. When the customer is also a business entity, the order is often a copy of the customer’s purchase order. The sales order captures vital information such as the customers name, address, and account number; the name, number, and description of the items sold; and the quantities and unit prices of each item sold. At this point, financial information such as taxes, discounts, and freight charges may or may not be included. After creating the sales order, a copy of it is placed in the customer open order file for future reference.

2. Check credit

Before processing the order further, the customers creditworthiness needs to be established. The circumstances of the sale will determine the
nature and degree of the credit check. Then decide credit period to make credit approval. The credit approval process is an authorization control and should be performed as a function separate from the sales activity.

3. Pick goods

The receive order activity forwards the stock release document (also called the picking ticket) to the pick goods function, in the warehouse. This document identifies the items of inventory that must be located and picked from the warehouse shelves. It also provides formal authorization for warehouse personnel to release the specified items. After picking the stock, the order is verified for accuracy and the goods and verified stock release document are sent to the ship goods task. If inventory levels are insufficient to fill the order, a warehouse employee adjusts the verified stock release to reflect the amount actually going to the customer. The warehouse employee adjusts the stock records to reflect the reduction in inventory. These stock records are not the formal accounting records for controlling inventory assets. They are used for warehouse management purposes only.

4. Ship goods

Before the arrival of the goods and the verified stock release document, the shipping department receives the packing slip and shipping notice from the receive order function. The packing slip will ultimately travel with the goods to the customer to describe the contents of the order. The shipping notice will later be forwarded to the billing function as evidence that the customer's order was filled and shipped. Upon receiving
the goods from the warehouse, the shipping clerk reconciles the physical items with the stock release, the packing slip, and the shipping notice to verify that the order is correct. The ship goods function thus serves as an important independent verification control point and is the last opportunity to detect errors before shipment. The shipping clerk packages the goods, attaches the packing slip, completes the shipping notice, and prepares a bill of lading.

5. Bill customer

The shipment of goods marks the completion of the economic event and the point at which the customer should be billed. Billing before shipment encourages inaccurate record keeping and inefficient operations. The billing function awaits notification from shipping before it bills, then credit approval. The bill customer function receives the sales order (invoice copy) from the receive order task. The completed sales invoice is the customer’s bill, which formally depicts the charges to the customer.

2.4.3. Procedure of Cash Receipt

According to Hall (2008), The sales order procedure described a credit transaction that resulted in the establishment of an account receivable. Payment on the account is due at some future date, which the terms of trade determine. Cash receipts procedures apply to this future event. They involve receiving and securing the cash; depositing the cash in the bank; matching the payment with the customer and adjusting the correct account; and properly accounting and reconciling the financial details of the transaction.
1. Open Mail and prepare remittance advice

A mail room employee opens envelopes containing customers payments and remittance advices. Remittance advices contain information needed to service individual customers accounts. This includes payment date, account number, amount paid, and customer check number. Only the portion above the perforated line is the remittance advice, which the customer removes and returns with the payment. Mail room personnel route the checks and remittance advices to an administrative clerk who endorses the checks for deposit only and reconciles the amount on each remittance advice with the corresponding check. The clerk then records each check on a form called a remittance list (or cash prelist), where all cash received is logged. The original copy is sent with the checks to the record and deposit checks function. The second copy goes with the remittance advices to the update AR function. The third goes to a reconciliation task.

2. Report and deposit check

A cash receipts employee verifies the accuracy and completeness of the checks against the prelist. Any checks possibly lost or misdirected between the mail room and this function are thus identified. After reconciling the prelist to the checks, the employee records the check in the cash receipts journal. All cash receipts transactions, including cash sales, miscellaneous cash receipts, and cash received on account, are recorded in the cash receipts journal. Next, the clerk prepares a bank deposit slip
showing the amount of the days receipts and forwards this along with the checks to the bank. Upon deposit of the funds, the bank teller validates the deposit slip and returns it to the company for reconciliation. At the end of the day, the cash receipts employee summarizes the journal entries and sends the following journal voucher entry to the general ledger function.

### 2.4.4. Revenue Cycle Controls

The objective of transaction authorization is to ensure that only valid transaction are processed (Hall: 2008).

<table>
<thead>
<tr>
<th>Control Points In The System</th>
<th>Sales Processing</th>
<th>Cash Receipts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Transactions authorization</strong></td>
<td>Credit check, Return policy</td>
<td>Remittance list (cash prelist)</td>
</tr>
<tr>
<td><strong>Segregation of duties</strong></td>
<td>Credit is separate from processing; inventory control is separate from warehouse; AR subsidiary ledger is separate from general ledger</td>
<td>Cash receipts are separate from AR and cash account; AR subsidiary ledger is separate from GL</td>
</tr>
<tr>
<td><strong>Supervision</strong></td>
<td></td>
<td>Mail room</td>
</tr>
<tr>
<td><strong>Accounting records</strong></td>
<td>Sales orders, sales journals, AR subsidiary ledger, AR control (general ledger), inventory subsidiary ledger, inventory control, sales account (GL)</td>
<td>Remittance advices, checks, remittance list, cash receipts journal, AR subsidiary ledger, AR control account, cash account</td>
</tr>
<tr>
<td><strong>Access</strong></td>
<td>Physical access to inventory; access to accounting records above</td>
<td>Physical access to cash; access to accounting records above</td>
</tr>
<tr>
<td><strong>Independent verification</strong></td>
<td>Shipping department, billing department, general ledger</td>
<td>Cash receipts, general ledger, bank reconciliation</td>
</tr>
</tbody>
</table>
2.5. The COSO’s Internal Control Framework

Internal control provides evaluation and enhancement of internal control system which is used by authority and incorporated into policies, rules, and regulation to control business operation. There are five components of internal control described in the COSO report (Tunggal: 2014), which are described as follow:

1. Control Environment

The control environment will establish the style of an organization and influence the control awareness of its people. Control is the foundation for all other components of internal control providing discipline and structure. Control environment factors include:

a. Integrity and ethics value

Integrity and ethical values are essential elements of the control environment, which affect the maintenance design, and monitoring of other components. Integrity and ethical values are the product of ethical standards and behavior of the entity including how it is communicated, and enforced in practice.

b. Commitment to competence

Competence is the knowledge and skills necessary to accomplish the task that restrict to individuals’ work. Commitment to competence includes management's judgment on the competence levels for particular jobs and how those levels translated into terms of skills and knowledge.
c. Participation board of commissioners or audit committee

Entity consciousness is strongly influenced by the board of commissioners and audit committee. Attributes relating with the board of commissioners and audit committee include independency the board of commissioners or audit committee of management, experience and high knowledge of its members, the breadth of involvement and monitoring activities, the adequacy of the action, the difficulty level of the questions asked by the board or the commissioner to management, and interaction with the council or committee of internal and external auditors.

d. Philosophy and management style

The philosophy and management operation style includes wide characteristic. The characteristics consist of: management approach over risk control the business, management measurement over financial report and the objective achievement over financial budget. This characteristic affects control environment if the management is just dominated by one person or more without consider the other control environment factors.

e. The organizational structure

The organizational structure of an entity gives a thorough framework for planning, directing, and controlling operations. An organizational structure includes consideration of the shape and nature of organizational units, including the processing of data and relationship management functions and reporting. In addition, the structure of the organization should define the authority and responsibility of the entity.
f. Determination of authority and responsibility

This method affects the understanding of the reporting relationships and responsibilities are defined in the entity. Method of determination of the authority and responsibilities include some considerations as follow:

- The entity's policies on things such as acceptable business practices, conflicts of interest and rules of behavior.
- Determination of responsibility and delegation of authority to handle issues such as the intent and purpose of the organization, functions and operation of the competent authority requirements.
- Description of duties of employees that assert specific tasks, reporting relationships and constraints.
- Documentation of a computer system shows the procedure for approval of the transaction and approval system changes.

g. Policies and practice of human resources

Practices and policies related to the work of employees, orientation, training, evaluation, counseling, promotion, compensation, and remedial measures.

2. Risk Assessment

Risk assessment entity for financial reporting purposes is the identification, analysis, and processing risks relevant to the preparation of the financial statements presenting fairly in accordance with generally accepted accounting principles. For example, risk assessment can explain how the entity considers the possibility of unrecorded transactions or identifies and analyzes significant estimates are recorded in the financial statements. Risk assessment
involves a dynamic and iterative process for identifying and assessing risks to the achievement of objectives. Risks to the achievement of these objectives from across the entity are considered relative to established risk tolerances. Thus, risk assessment forms the basis for determining how risks will be managed. A precondition to risk assessment is the establishment of objectives, linked at different levels of the entity. Management specifies objectives within categories relating to operations, reporting, and compliance with sufficient clarity to be able to identify and analyze risks to those objectives. Management also considers the suitability of the objectives for the entity. Risk assessment also requires management to consider the impact of possible changes in the external environment and within its own business model that may render internal control ineffective.

3. Control Activities

Control activities are the policies and procedures that help to ensure the necessary actions carried out in the direction of the risks to the achievement of entity objectives. Generally, control activities that might be relevant to the audit can be classified as policies and procedures as follow:

- Performance review

  Control activities include a review of actual performance against the budget, forecasts, or the performance of the previous period, connecting a series of different data or financial operations with each other along with the analysis of the relationships and investigative and corrective actions.
- **Control of information process**
  
  Variety of controls conducted to check the accuracy, completeness, and authorization of transactions. Two broad groupings of information systems control activities are the general controls and application controls. General controls include controls over data center operations, acquisition and maintenance of software systems, security access, development and maintenance of application systems. While the application control applies to the processing of individual applications. This control helps to establish that the transaction is legitimate, supposed authorized, and processed completely and accurately.

- **Physical control**
  
  Activities includes physical security of assets, including adequate safeguards such as facilities that are protected, of access to assets and records, the authority for access to computer programs and data files, and data calculation periodically and comparing the number listed on the controller records.

- **Segregation of duties**
  
  The imposition responsibilities to different people for authorizing transactions, recording transactions, organized storage assets intended to reduce the opportunity for someone in a good position for cheating and also hide the errors and irregularities in running his duties in normal conditions.
4. Information and Communication

Information and communication are identifying, understanding, and exchange of information in a form and time that allows people performing their responsibilities. Information is necessary for the entity to carry out internal control responsibilities to support the achievement of its objectives. Management obtains or generates and uses relevant and quality information from both internal and external sources to support the functioning of other components of internal control. Communication is the continual, iterative process of providing, sharing, and obtaining necessary information. Internal communication is a mean by which information is disseminated throughout the organization, flowing up, down, and across the entity. It enables personnel to receive a clear message from senior management that control responsibilities must be taken seriously. External communication enables inbound communication of relevant external information, and provides information to external parties in response to requirements and expectations.

5. Monitoring

Monitoring is the process of assessing the quality of internal control performance all the time. Ongoing evaluations, separate evaluations, or some combination of the two are used to ascertain whether each of the five components of internal control, including controls to effect the principles within each component. Ongoing evaluations, is embedded into business processes at different levels of the entity, to provide timely information. Separate evaluations, conducted periodically, will vary in scope and frequency depending on
assessment of risks, effectiveness of ongoing evaluations, and other management considerations. Findings are evaluated against criteria established by regulators, recognized standard-setting bodies or management and the board of directors, and deficiencies are communicated to management and the board of directors as appropriate.