CHAPTER TWO

THEORETICAL FRAMEWORK

A. Literature Study

A.1. Performance

Performance in general can be interpreted as a result of an activity or an achievement of an activity. In specific, performance is an output of an employee, a result of management process, or output of an organization as a whole, whereas the output can be measured or compared with the standard specification that has already been determined. (Prasetya Irawan, 2000:17).

In line with the above, manpower is an important resource within an organization to enable the organization to survive in the long term. Giley, Boughton and Mayounich (1999:2) describe that the challenge to an organization performance is to develop a management system that enables the organization to develop its employee as its greatest asset. To fulfill this objective, an organization needs to design, develop and implement a performance process consistently in order to compete in the market. That is why it is necessary to establish an organization performance process that would link the compensation and reward of an employee to his or her performance which in turn is derived from the organization's business strategy, vision, and from the customer expectations. In Wikipedia, performance is the activity of a unit (be it an individual, team, department or division) of an organization intended to accomplish some desired result.

A.2. Performance Management

Performance Management involves a set of regular, ongoing human resource activities typically carried out by managers and supervisors relative to their subordinates, and aim at enhancing and maintaining

employee performance toward the achievement of desired performance objectives. These activities, including regular performance, feedback, coaching, and formal performance appraisal, are typically aimed at encouraging employee's productivity, motivation, and development, and can be directed toward both individual employees at all employment levels and locations as well as teams within a given work unit (Fisher et al.2003; Anthony et.al,2002). Performance management activities can also have a major influence on other individual human resource management decisions such as staffing and promotion, training, career development, and compensation (Shen, 2005).

A.3. Performance Measurement

Performance measurement is the process of assessing progress toward achieving predetermined goals. Performance Management is building on that process, adding the relevant communication and action on the progress achieved against these predetermined goals.

The main purpose of performance management is to link individual objectives to the organizational objectives that would bring about that individuals important worth for the whole enterprise. Additionally, performance management tries to develop skills of people to achieve their capability to satisfied their ambitiousness and also increase firm's profit. Measurement provides a means of evaluating a company's progress toward accomplishing these goals.

Performance measures may comprised of standards used to evaluate and communicate performance against expected results. Through performance measurement, an organization can assess how well its operations are aligned with its business strategy. As a result, measurement plays a crucial role in translating business strategy into results. In detail, performance measurement is an essential tool for management to:

1. Ensure the understanding of staff on measurement tools that is used for evaluating the staff achievement.
2. Ensure the achievement of target or business plan.
3. Monitor and evaluate the business plan implementation and compare the result with the target in order to find the corrective action for unachievable targets.
4. Give reward and penalty for staff based on the result of performance measurement.
5. Use as communication tools for management and staff.
6. Identify the customer satisfaction.
7. Understand the activity of business process.
8. Ensure the decision making process being conducted objectively.
9. Show the required improvement in certain field.
10. Disclose the problems.

There are several different approached to performance measurement. Many organizations measure what is easily accessible and simple, such as existing finance ratios that are not necessarily linked to business strategy. One of the best approaches to identify performance measurement for a company is through the use of a methodology known as the Balanced Scorecard.

A.2. Productivity

Quality and productivity are twin paths to creating value for both customers and companies. In broad terms, quality focuses on the benefits created for the customer's side of the equation and productivity addresses the financial costs incurred by the company. Integrating quality and productivity improvement programs will improve the long-term profitability of the company.

There is little agreement on what the term productivity means (e.g.,Bullock & Batten, 1983;Campbell & Campbell, 1988 a & b; Craig & Harris, 1973; Kopelman, 1986;Tuttle, 1983). It has been used to mean the

efficiency or effectiveness of individuals, groups, organizational units, entire organizations, industries and nations. It is sometimes used interchangeably with such concepts as output, motivation, individual performance, organizational effectiveness, production, profitability, cost effectiveness, competitiveness, work quality and what a new product can makes a company increase its value of service.

Most productivity writers agree, however that the term productivity should be limited to efficiency or to efficiency and effectiveness (cf.Tuttle,1981). Efficiency means a measure of outputs divided by inputs. For example, monthly output of a production unit divided by the number of personnel-hours used to generate that output would be an efficiency measure. Effectiveness is the relationship of outputs to some standard or expectation. For example, monthly production output expressed as a percentage of the goal for that month would be an effective measure. Thus efficiency is how well the organization uses its resources to produce its products or services. Effectiveness is how well the organization is reaching its goals. (cf.Tuttle,1981).

A.3. Service Quality and Customer Satisfaction

The definition of service is a series of activities (processes) that continue and sustain. Service is an essential part in a company performance because it is directly affected to the customer satisfaction level. Satisfaction is a condition that a customer feels after utilizing a process or activity delivered by the service company. In other words, customer satisfaction is a differential between the service level that is expected versus what is being perceived by the customer. Hence:

- Expectation value = perception value, it means customer satisfied.
- Expectation value < perception value, it means customer very satisfied.
- Expectation value > perception value, it means customer not satisfied.

Expectation value can be set up based from past experiences, from references from other competitors, or via advertisement in the media whilst perception value is the company's ability to serve the customer in order to satisfy the customer's needs and wants.

The intangible, multifaceted nature of many services makes it harder to evaluate the quality of a given service. In their research, Valarie Zeithaml, Leonard Berry and A. Parasuraman (*Delivering Quality Service: Balancing Customer Perceptions and Expectations*, 1990) found a high degree of correlation between several variables and consolidated them into five broad dimensions:

- Tangibles (appearance of physical elements)
- Reliability (dependable, accurate performance)
- Responsiveness (promptness and helpfulness)
- Assurance (competence, courtesy, credibility, and security)
- Empathy (easy access, good communications, and customer understanding).

The harmonization of the above dimensions will contribute to a customer's satisfaction. But, in reality, there is always a gap between customer's perceived value and customer's expectation. If the company wants to increase its quality of service, the company should minimize the gap or even further, eliminate the gap.

According to Zeithaml, service quality is customer perception on special service. He outlined service quality, as follows:

Service Quality = Satisfaction with service delivery
= Perceive service delivery – expected service delivery.

Berry gives a definition that service quality is an opinion that is resulted from the service that is produced (perceived) compared to the expected service by the customer.

A.4. The Balanced Scorecard

The Balanced Scorecard was developed by Robert Kaplan, an accounting professor at Harvard University, and David Norton, a consultant from the Boston area. In 1990, Kaplan and Norton led a research study of a dozen companies with the purpose of exploring new methods of performance measurement. The impetus for the study was a growing belief that financial measures of performance were ineffective for the modern business enterprise. Representatives of the study companies, along with Kaplan and Norton, were convinced that a reliance on financial measures of performance was affecting their ability to create value. The group discussed a number of possible alternatives but settled on the idea of a scorecard, featuring performance measures capturing activities from throughout the organization covering customer issues, internal business processes, employee activities, and shareholder concerns. Kaplan and Norton labeled the new tool the Balanced Scorecard and later summarized the concept in the first of three Harvard Business Review articles, "The Balanced Scorecard Measures That Drive Performance".

Over the next four years, a number of organizations adopted the Balanced Scorecard and achieved immediate results. Kaplan and Norton discovered these organizations were not only using the Scorecard to complement financial measures with the drivers of future performance, but the scorecards are also used in communicating strategies in the company. As the Scorecard gained prominence with organizations around the globe as a key tool in the implementation of strategy, Kaplan and Norton summarized the concept and the learning to that point in their 1996 book, The Balanced Scorecard. Since that time, the Balanced Scorecard has been adopted by nearly half of the Fortune 1000 organizations, and the momentum continues unabated. So widely accepted and effective has the Scorecard become that the Harvard Business Review recently hailed it as one of the 75 most influential ideas of the twentieth century.

The Balanced Scorecard is a carefully selected set of quantifiable measures derived from an organization's strategy. The measures selected for the Scorecard represent a tool for leaders to use in communicating to employees and external stakeholders the outcomes and performance drivers by which the organization will achieve its mission and strategic objectives.

Since its introduction in 1990, the Balanced Scorecard has been embraced by corporations around the world. Recent estimates suggest at least 50 percent of Fortune 1000 organizations use a Balanced Scorecard system. For profit companies have used the system to generate improved financial results, align employees with strategy, base resource allocation decisions on company goals, and improve collaboration. This transition in value creation from physical to intangible assets has major implications for measurement systems. Financial measurements were perfectly appropriate for a world dominated by physical assets. However, the new economy with its premium on intangible assets demands more from our performance measurement systems.

Today's system must have the capabilities to identify, describe, monitor, and provide feedback on the intangible elements driving organizational success. The Balanced Scorecard focuses on identifying and translating all of an organization's value-creating mechanisms, including intangibles, into objectives, measures, targets, and initiatives. As such, organizations are turning to the Scorecard in ever-increasing numbers as a powerful framework in both measuring and managing intangible assets.

Balance Scorecard conducts a company measurement performance by using four perspectives, namely, financial perspective, learning and growth perspective, internal business process perspective and customer satisfaction perspective.

1. **Financial Perspective**

Financial measures are important components of the Balanced Scorecard. It can be expressed by using measures related to accounting income, such as operating income and gross margin. There are three financial themes that drive the business strategy:

a. Revenue growth and mix

Revenue growth and mix refer to expanding product and service offerings, reaching new customers and markets, changing the product and service mix toward higher-value-added offerings, and pricing products and services.

b. Cost reduction/productivity improvement

The cost reduction and productivity objective refers to efforts to lower the direct costs of products and services, and reduce indirect costs. Efforts to reduce costs through dedicated automation and standardized processes may conflict with the flexibility required to customize new products and services for new markets. Therefore, the productivity objective should focus on revenue enhancement, for example revenue per employee to encourage shifts to higher value-added products and services and to enhance the capabilities of the organization's physical and personnel resources. The simplest cost reduction objective is to reduce the unit cost of performing work or producing output. Since the cost of performing activities or producing outputs may use resources and activities from many different departments in an organization, an activity-based process-oriented costing system will likely be required for accurate measurement of the unit cost of processing transactions and producing output. Objectives to reduce spending and expenses levels, however, should be balanced, on the scorecard, by other measures, for example the customer responsiveness, quality, and

performance, so that cost cutting does not interfere with achieving important customer and internal process objectives.

c. Asset utilization/investment strategy

For the asset utilization theme, attempt is made to reduce the working capital levels required to support a given volume and mix of business. Objectives, such as return-on-capital employed, return-on-investment, and economic value-added, provide overall outcome measures of the success of financial strategies to increase revenues, reduce costs, and increase asset utilization.

Eventually, all objectives and measures in the other scorecard perspectives should be linked to achieving one or more objectives in the financial perspective. This linkage to financial objectives explicitly recognizes that the long-run goal for the business is to generate financial returns to investors, and all the strategies, programs, and initiatives should enable the business unit to achieve its financial objectives. Every measure selected for a scorecard should be part of a link of cause-and-effect relationships, ending in financial objectives, that represents a strategic theme for the business unit. For most organizations, the financial themes of increasing revenues, improving cost and productivity, enhancing asset utilization, and reducing risk can provide the necessary linkages across all four scorecard perspectives.

In order to measure the financial perspective of a company, it requires a secondary data, such as:

1. Financial Report

A company's financial report is usually undertaken so that investors, creditors, and other stakeholders can make strategic decisions.

1.1 Financial Statement

Financial statement is the final result of a recording process on the summary of financial transactions which occur within one year of book keeping record (Baridwan, 1981:1). Financial statement will show the financial position of a company and also results that being achieved within the specific year. The relevant information in the financial statement should be recorded timely and understandably to avoid ambiguity. Financial statement is consisted of 4 (four) components:

a. Balance Sheet

   Fress and Warren (1994:18) mentioned that balance sheet is a list of assets, liabilities, owner's equity for a specific period.

b. Income Statement

   Any analysis of profitability would have to begin with the term of profit.(George T.Friedlob, Essential of Financial Analysis, 2003, 33). Profit is viewed as the same thing as net income, which is the bottom line result on the income statement. Net income is calculated as revenues and gains less expenses and losses. A company should make an Income Statement to give description on the result of a company business within a specific period. In general, income statement is consisted of 4 (four) major components: revenues, expenses, gain, and losses (The Financial Accounting Standard Board Concept Statement No.6, 1985)

c. Retained Earning Statement

   Retained Earning statement is a report that being made to understand the fluctuation of equity as the result of company operation within a certain period. The report is compiled with the calculation of income statement.

d. Funds Statement

Funds statement is a report that being made to acknowledge the source of income and the utilization on the specific period.

1.2 The purpose of Financial Statement

Based on FASB Concept Statement no.1 (1978), there are 2 (two) purposes in producing a Financial statement, as follows:

a. General purpose is to provide a beneficial information for decision makers. Decision makers can be internal users such as management, employee, board of directors, and for external users such as investor, creditor, potential investor, government and public society.
b. Specific purpose is to provide specific information covering: forecast of cash flow, financial condition, income and earning, and how the income being attained and utilized.

For maximum benefits, a financial statement has to meet the requirements of data relevancy, understandable, neutral, complete, on time, comparable.

1.3. The limitation of Financial Statement

The limitation of financial statement based on Munawir (2004:10) is as follows:

1. Financial statement is a historical report, since it is recorded an event that already past. Hence, financial statement cannot be the only source of information to be used for decision making process.
2. Financial statement is a general report and not being intended to fulfill a specific requirement of certain units.
3. The process of making a financial statement often used a forecast approach and also considerations.
4. Financial statement is a conservative model for uncertainty situation.

5. Financial statement focuses on the economical approach of any event or transaction rather than the formal approach.
6. Financial statement uses technical accounting terminology and users considered to understand the technical accounting terminology.

1.4 The Financial Ratio Analysis

Based on Bernstein (1989:27), financial ratio analysis is a process to evaluate the financial position of a company including the result of business activity in the current situation and past time with a purpose to determine the most possible estimation for the future financial position and the result of business activity. Event the financial ratio analysis has been done, it would not mean that the decision making process has absolutely correct or valid. Since it should be refer to the reliability of data and information, the level of interest of the company, and the perspective of the party involved in this matter. Further being mentioned that measuring the company performance qualitatively is the same necessity with the financial analysis that being conducted.

1.5 The technical analysis of financial statement

It is required some technical analysis as a tool to analyze the financial statement in order to translate and simplify the financial statement. As being mentioned that the purpose of financial statement is to understand the level of liquidity, solvability, and business stability of a company. According to Aragon, The Executive's Guide to Financial Analysis, there are 4 (four) steps that need to be taken by financial analyst, as follows:

a. Identifying the problems
b. Looking for information
c. Valuing the information quality

d. Figuring out the result of analysis

Harnanto (1991:155) mentioned that the analysis of financial statement is actually a study to see the correlation of posts recorded at the financial statement, whether it is structural linkage or trend linkage. In general, there are analytical techniques that can be used as a tools to analyse, as follows:

1. Cross Sectional Techniques

   This technique uses a comparison of financial statement of a company to another company that plays in the same field of business.

2. Time-Series Techniques

   The purpose of this technique is to do a research on financial aspects of a company based on financial statement in different periods. This technique can done in:

   i. Trend Statement is a trend analysis to understand the trend of financial situation. This technique will show a trend of decreasing, increasing or stabil situation of company progress of development.

   ii. Common-Size Statement is a financial statement that uses a percentage of in every component of posts in the financial statement, that will be used as a basic comparison for measuring the financial statement.

3. Financial Ratio Analysis

   Ratio analysis method is linking the one financial data to the other. This tool of ratio will describe the relation of important posts in the financial statement, hence one can analyze the financial position of a company. In general, financial ratio consisted of 4 (four) terms:

   a. Liquidity ratio is a ratio that is used to measure the company ability to fulfill its obligation when the time due. A company can be categorized as liquid, if company can

1. Current Ratio, is formulated as follows:

$$\frac{\text{Current Assets}}{\text{Current Liabilities}}$$

2. Quick Ratio/Acid Test Ratio, is formulated as follows:

$$\frac{\text{Quick Assets}}{\text{Current Liability}}$$

3.Cash Ratio, is formulated as follows: (Munawir, 2004:104)

$$\frac{\text{Cash}}{\text{Liabilities}}$$

b. Solvability Ratio is a ratio that is used to measure company performance in fulfilling its obligations when the company being liquidated. A company rated as solvable when the owners equity can fulfill its liabilities or obligations.

c. Rentability Ratio is a ratio that is used to measure the company ability in getting profit within certain period of time. This ratio is considered to be the most valid tool to measure the result of company operation and also can be used as an indicator for the effectiveness of a management, forecasting company profit, and the control management tools. The ratio that being used is as follows:

1. ROI
2. ROE
3. Total Assets Turnover
4. Operating Margin Ratio

d. Activity Ratio is a ratio that shows how the resources being used and also describes the level of efficiency in a company. Activity Ratio that being used are:

1. Collection Period
2. Inventory Turnover

1.6 Analysis Measurement Standard

Weston and Brigham (1996: 6C) mentioned that the value of a ratio can be beneficial if it is compared with a reference level. Reference level that can be used as follows:

1. Reference level of the company itself from the past experience.
2. Reference level in average (in the same field of industry)
3. Reference level of competitor
4. Reference level of Planning

2. Customer Perspective

There are two measurement groups in customer aspect, as follows:

a. Core Measurement Group (Kaplan and Norton, 2000) which is a generic indicator that is used by many companies, consists of:
   1. Market Share, showing the sales portion in a certain segment.
   2. Customer Acquisition, level of company's ability to attract new customer
   3. Customer Satisfaction, level of customer satisfaction on certain performance criteria
   4. Customer Profitability, level of net revenue gain by the company from certain segment of market.

b. Customer Value Proposition, showing a performance driven measurement that relates to the level of satisfaction, loyalty, retention and acquisition. It can be categorized as follows:
   1. Product or service attributes, covering service function, price and quality.
   2. Customer relationship
   3. Image and reputation

In the customer perspective of the Balanced Scorecard, companies identify the customer and market segments in which they have chosen to compete. These segments represent the

sources that will deliver the revenue component of the company's financial objectives. The customer perspective enables companies to align their core customer outcome measures: satisfaction, loyalty, retention, acquisition, and profitability, to targeted customers and market segments. It also enables them to identify and measure, explicitly, the value propositions they will deliver to targeted customers and market segments. The value propositions represent the drivers, the lead indicators, for the core customer outcome measures.

In the past, companies could concentrate on their internal capabilities, emphasizing product performance and technology innovation. But companies that did not understand their customers' needs eventually found that competitors could make inroads by offering products or services better aligned to their customers' preferences. Thus, companies are now shifting their focus externally, to customers.

In the customer perspective of the Balanced Scorecard, company's management needs to translate their mission and strategy statements into specific market and customer-based objectives. Businesses must identify the market segments in their existing and potential customer populations and then select the segments in which they choose to compete. Identifying the value propositions that will be delivered to targeted segments becomes the key to developing objectives and measures for the customer perspective. Thus, the customer perspective of the scorecard translates an organization's mission and strategy into specific objectives about targeted customers and market segments that can be communicated throughout the organization.

Measuring market share is straightforward once the targeted customer group or market segment has been specified. The measure of market share with targeted customers would be

balancing the pure financial signals to indicate that an immediate review of the strategy implementation was likely required.

Clearly, a desirable way for maintaining or increasing market share in targeted customer segments is to start by retaining existing customers in those segments. Many companies want to measure customer loyalty by the percentage growth of business with existing customers. Customer acquisition could be measured by either the number of new customers or the total sales to new customers in these segments. Both customer retention and customer acquisition are driven by meeting customers' needs. Customer satisfaction measures provide feedback on how well the company is doing.

Customer value propositions represent the attributes that supplying companies provide, through their products and services, to create loyalty and satisfaction in targeted customer segments. The value proposition is the key concept for understanding the drivers of the core measurements of satisfaction, acquisition, retention, and market share.

3. Internal Business Perspective

In this perspective, the task is to identify those processes and develop the best possible measures in which the progress can be monitored. Each business has a unique set of processes for creating value for customers and producing financial results. This model encompasses three principal business processes:

1. Innovation

   In the innovation process, the business unit researches the emerging or latent needs of customers, and then creates the products or services that will meet these needs. The operations process, the second major step in the generic internal value chain, is where existing products and services are produced and

delivered to customers. This process has historically been the focus of most organizations' performance measurement systems.

2. Operations

   The operations process remains important and organizations should identify the cost, quality, time, and performance characteristics that will enable it to deliver superior products and services to its targeted current customers. This process stresses efficient, consistent, and timely delivery of existing products and services to existing customers. Traditionally, these operating processes have been monitored and controlled by financial measures, such as standard costs, budgets, and variances.

3. Post sales service

   Post sale service includes warranty and repair activities, treatment of defects and returns, and the processing of payments. Thus, cycle times from customer request to ultimate resolution of the problem can measure the speed of response to failures. The post sale service process enables companies to feature, when appropriate, important aspects of service that occur after the purchased product or service has been delivered to the customer.

4. Learning and Growth Perspective

The measures in the Learning and Growth perspective of the Balanced Scorecard are really the enablers of the other three perspectives. Once measures being identified and related initiatives in Customer and Internal Process perspectives being revealed, it can discover some gaps between current organizational infrastructure of employee skills, information systems, and organizational climate (such as culture) and the level necessary to achieve the results being targeted. The measures that being

designed in this perspective will help to close that gap and ensure sustainable performance for the future.

It is expected that a mix of core outcome (lag) measures and performance drivers (lead measures) represent the Learning and Growth perspective. Employee skills, employee satisfaction, availability of information, and alignment are drivers for this perspective. The objectives established in the financial, customer, and internal-business-process perspectives identify where the organization must excel to achieve breakthrough performance. The objectives in the learning and growth perspective provide the infrastructure to enable ambitious objectives in the other three perspectives to be achieved. Objectives in the learning and growth perspective are the drivers for achieving excellent outcomes in the first three scorecard perspectives.

Three principal categories for the learning and growth perspective:

1. Employee capabilities

2. Information systems capabilities

   Front-line employees need accurate and timely information about each customer's total relationship with the organization. They also need information about which segment an individual customer occupies so that they can judge how much effort should be expended not only to satisfied the customer on the existing relationship or transaction, but also on learning about and attempting to satisfied emerging needs from that customer. Employees in the operations side of the business need rapid, timely, and accurate feedback on the product just produced or the service just delivered. Only by having such feedback can employees be expected to sustain improvement programs where they systematically eliminate defects and drive excess cost, time, and waste out of the production system. Excellent information systems are a requirement for employees to improve

processes, either continuously, or discontinuously, through process redesign and reengineering projects. Measures of strategic information availability could be percentage of processes with real time quality, cycle time, and cost feedback available and percentage of customer-facing employees having on-line access to information about customers.

3. Motivation, empowerment, and alignment

   Even skilled employees, provided with superb access to information, will not contribute to organizational success if they are not motivated to act in the best interests of an organization or if they are not given freedom to make decisions and take actions. Thus the third of the enablers for the learning and growth objectives focuses on the organizational climate for employee motivation and initiative.

In general, there are three core employee measurements, as follows:

1. Employee satisfaction

   The employee satisfaction objective recognizes that employee morale and overall job satisfaction are now considered highly important by most organizations. Satisfied employees are a precondition for increasing productivity, responsiveness, quality, and customer service. So, for companies to achieve a high level of customer satisfaction, they may need to have the customers served by satisfied employees.

   Employee morale is especially important for many service businesses where, frequently, the lowest-paid and lowest-skilled employees interact directly with customers. Companies typically measure employee satisfaction with an annual survey. The content of the survey could include:

1. Involvement with decisions
2. Recognition for doing a good job
3. Access to sufficient information to do the job well
4. Active encouragement to be creative and use initiative
5. Support level from staff functions
6. Overall satisfaction with company

2. Employee retention

Employee retention captures an objective to retain those employees in whom the organization has a long-term interest. The theory underlying this measure is that the organization is making long-term investments in its employees so that any unwanted departures represents a loss in the intellectual capital of the business. Long-term, loyal employees carry the values of the organization, knowledge of organizational processes. Employee retention is generally measured by percentage of key staff turnover.

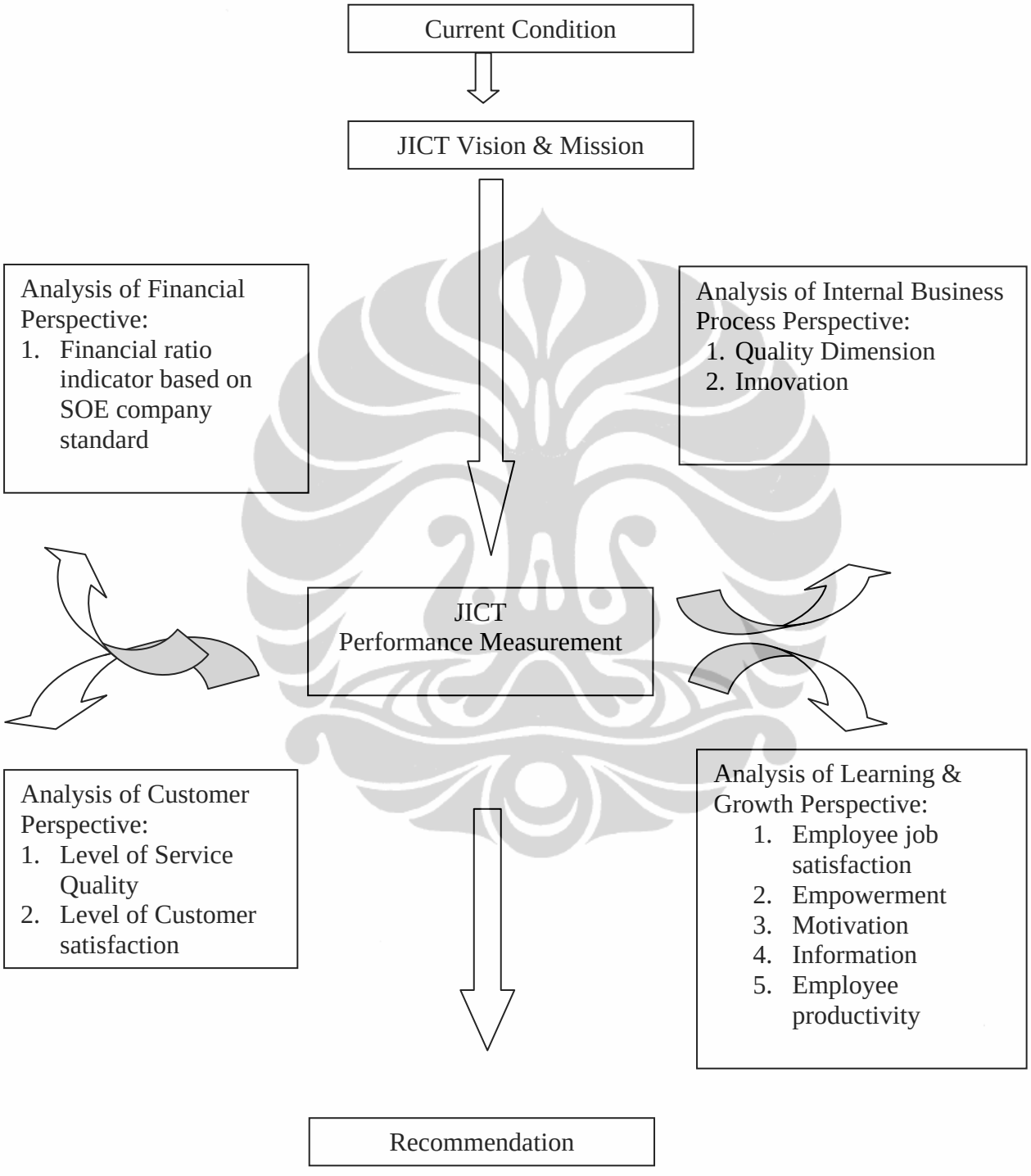
3. Employee productivity

Employee productivity is an outcome measure of the aggregate impact from enhancing employee skills and morale, innovation, improving internal processes, and satisfied customers. The goal is to relate the output produced by employees to the number of employees used to produce that output. There are many ways in which employee productivity has been measured. The simplest productivity measure is revenue per employee. This measure represents how much output can be generated per employee. As employees and the organization become more effective in selling a higher volume and a higher value-added set of products and services, revenue per employee should increase. Revenue per employee is a useful diagnostic indicator as long as the internal structure of the business does not change too radically, as it would if the

organization substitutes capital or external suppliers for internal labor. If a revenue per employee measure is used to motivate higher productivity of individual employees, it must be balanced with other measures of economic success so that the targets for the measure are not achieved in dysfunctional ways.

The enablers for learning and growth come primarily from three sources: employees, systems, and organizational alignment. Strategies for superior performance will generally require significant investments in people, systems, and processes that build organizational capabilities.

B. Conceptual framework of analysis



C. Methodology Of Thesis

C.1. Method of Thesis

Method of Thesis is a Descriptive Analysis. Descriptive refers to explaining the current performance measurement of JICT and compared to one using Balanced Scorecard approach. Analysis means after defining the measurement tools, the author identifies factors that need to be considered by the company how best to determine its performance measurement, and also offers suggestions and recommendations on the best policy for viewing its performance through four perspectives, namely, financial, customer, internal business process and learning & growth aspects.

C.2. Method of Data Collection

Data collection in the field research, consists of:

1. Primary data, through questionnaires
2. Secondary Data

   The author maintains strict consistency on the procedures involved in the data collection so as to qualify the data competent and reliable. The relevant theories which underlie this thesis are obtained by reading relevant academic reference.
3. Further, the analysis and data processing will be done as follows:

   Population and Sampling

   To perform an evaluation of PT. JICT performance using Balance Scorecard, the author use two kinds of questionnaire:

   a. For Learning and Growth perspective, the author identifies samples from a total population of 1,002 permanent employees, situated in Jl. Sulawesi Ujung No.1, Tanjung Priok, Jakarta.

      The same population is used for research on Job Satisfaction, Motivation and Empowerment consists of 71 persons under Managerial level and 931 persons as staff. As the population is

stratified (Prasetya Irawan, 2006:153), the author uses Stratified Random Sampling techniques, using Population Sample table from Lynch et.al, 1974.

Total sample used was 88 (for sampling error 0,10).

Population		Sample
Managerial	71	71 x 88 = 6 1002
Staff	931	931 x 88 = 82 1002
Total	1002	Total = 88

Hence, the author took sampling randomly from managerial level, 6 persons, and 88 persons from the staff.

b. For Customer perspective measurement, the author used the population of Shipping Lines that have formal agreement with PT. JICT. There are in total 25 Shipping Lines, each of which is represent by 2 (two) respondents. So, the author distributes 50 surveys to the customers.

As the population is evenly distributed, (Prasetya Irawan, Penelitian Kualitatif & Kuantitatif untuk Ilmu-Ilmu Sosial, 2006:155), the author used Systematic Sampling techniques, using Population Sample table from Lynch et.al, 1974.

Total sample used is 33 (for sampling error 0,10).

C.3. Model of Analysis

a. Current condition of PT. Jakarta International Container Terminal
b. Performance measurement using Balanced Scorecard Approach:
    i. Performance measurement in the aspect of learning & growth

    For measuring the performance of learning and growth perspective, the author calculates the score, score weight and range of scale of 2 (two) indicators, Job Satisfaction Level and Motivation & Empowerment. The score value and scale range is used to measure the result of respondent's opinion on the questionnaire distributed to JICT employee. (detail calculation attached in Appendix 4.3)

    ii. Performance measurement in the aspect of internal business process

    For measuring the performance of internal business process perspective, the author uses 2 (two) indicators, as follows:

    1. Innovation

       For this indicator, the author uses the respondent's opinion on 3 (three) features of innovation that JICT provides to its customer.

    2. Operation

       For this indicator, the author analyzes JICT Level of Service in operational service, compared to the performance standard based on Decree of Director General of Sea Transportation No.PP 72/2/20-99, regarding the Standard of Performance of the Operational Service at the Sea Port.

    iii. Performance measurement in the aspect of Financial

    In order to measure the financial aspect of JICT, the author conducted a direct observation on Financial Report, made a comparison on 3 (three) years financial statements, and also

made a rating for 7 (seven) aspects of financial ratios, referring to the Decree of Minister of State Owned Enterprise No.100/MBU/2002 dated June 4th, 2002, regarding the measurement of State Owned Company financial condition with the defined indicators.

iv. Performance measurement in the aspect of customer perspective

The questionnaire contains 24 questions, whereas each question has 5 (five) category of answer (Likert Scale), as follows:

1. Very Unsatisfied, score = 1
2. Not Satisfied, score = 2
3. Quite Satisfied, score = 3
4. Satisfied, score = 4
5. Very Satisfied, score = 5

Above alternatives has different weight, in which the first alternative is rated as 1 (one) and consecutively until the fifth alternative is rated as 5 (five). For further calculation, the author deduct the perception score from expectation score. If the variance is negative, it means that the level of service given is lower than expected. But, if the variance is positive, it means the level of service given has exceeded the expectation of customer.

To measure the level of customer satisfaction, the author compare the perception score and the expectation score and multiply with percentage, by using formula of (Lovelock Christopher, 1994:111):

$$\text{Level of Satisfaction} = \frac{\text{Perception Score}}{\text{Expectation Score}} \times 100\%$$

CHAPTER THREE
OVERVIEW OF PT. JAKARTA INTERNATIONAL CONTAINER TERMINAL

A. Company Profile

Indonesia Port Corporation (IPC) II invested in PT. Jakarta International Container Terminal (JICT) based on its Deed of Establishment no.72 dated March 27, 1999, where 48,9% of its shares are owned by IPC II, 51% by Hutchison Port Jkt Pte Ltd formerly known as Grosbeak PTE Ltd. and 0.1% by Maritime Employee Cooperative (KOPEGMAR). IPC II is a state-owned enterprise, which operates 12 (twelve) of Indonesia's largest ports in 10 (ten) provinces. IPC II control operation areas in 10 (ten) provinces that entail 12 (twelve) commercial ports i.e. Port of Teluk Bayur in West Sumatra Province, Port of Jambi in Jambi province, Port of Boom Baru in South Sumatra Province, Port of Pulau Baai in Bengkulu Province, Port of Panjang in Lampung Province, Port of Tanjung Pandan and Port of Pangkal Balam in Bangka Belitung Province, Port of Ciwandan in Banten Province, Port of Tanjung Priok and Port of Sunda Kelapa in Jakarta Capital District Province, Port of Cirebon in West Java Province and Port of Pontianak in West Borneo Province.

Hutchison Port Holding (HPH) is the world's leading port developer and operator as well as an industry leader in the application of technologies to strengthen the entire transportation and logistics chain. As an organization that actively invests in the development of modern port infrastructure, HPH is committed to playing a significant role in the development of the economies and the expansion of international trade opportunities for the countries in which it operates.

JICT was formed in April 1999 to operate Container Terminal 1 and 2 at the Tanjung Priok Seaport and JICT will be under a BOT Concession for 20 years. JICT covers a total of 100 hectares and is the largest container

terminal in Indonesia. The purpose of establishment is to provide container terminal services, in which the scope of services can be in the form of:

1. Loading and unloading container;
2. Shifting the container from berth to container yard and vice versa;
3. Handling container in the yard including lifting, grounding, delivery and receiving of container;
4. Rendering the service of container terminal operation;
5. Handling a multi mode transportation activity; *(Not yet in place)*
6. Conducting a warehouse activity (Container Freight Station) which cover the activity of stuffing and stripping container, and also container stacking at CFS; *(Not yet in place)*
7. Conducting activity that relates to container terminal business, including activity of container cleaning, pre-trip inspection container, fumigation and container repair. (Not yet in place)

B. Equipment & Infrastructures

Equipment and infrastructures at JICT are the crucial parts of service delivery. Most of equipments at JICT are fixed assets, such as Quay Cranes (QC) and Rubber Tyre Gantry Cranes (RTGC) that have 25 years life time. This valuable asset requires the optimum utilization without ignoring the maintenance and repair program.

Infrastructures such as container yard also need to be well maintained to enable good service delivery. JICT also installs CCTV (Close Circuit Television), which has function to monitor and record the situation and traffic in the container yard area, gatehouse, fences, and building. This CCTV is a significant tool for JICT to record the evidence if there is any mis-conduct occur in the terminal, adding more information to the Safety and Security unit.

JICT installs CTMS (Container Terminal Management System) in the Operation and Planning section which connects to Billing system to enable JICT exchange documents via system with Shipping Lines or Agents. This

CTMS system is a system that provides the data sequence for container being discharged or loaded, and also the inventory of containers at the container yard.

Below is the information of JICT equipment & infrastructures for the year 2007.

Table 3-1

JICT Fact Sheet

JICT FACT SHEET	
A. Stacking Resources:	
A.1 Capacity	
A.1.1 Stacking Capacity (TEUs)	36.193
A.1.2 Reefer Points	328
A.1.3 Terminal Areas (Ha)	46
A.1.4 Operational Ground Slot (TEUs)	10.643
B. Terminal Equipment:	
B.1 No of Berths	8
B.2 Berth Configuration	
B.2.1 Total Berth Length (m)	2.150
B.2.2 Depth Alongside (m)	8.06-14
B.3 No of Cranes	
B.3.1 Quay Cranes	16
B.3.2 RTG	56
B.3.3 Heavy Duty Loaders	28
B.3.4 Reach Stackers	
B.4 Operational Equipment	
B.4.1 Operational Quay Cranes	16
B.4.2 Operational Vessel Berth Length (m	2.150
C. Equipment Coverage (TEU)	
C.1 RTG	51
C.2 Frontloaders / Toplifters	

Source: JICT MIS Report – HPH Benchmarking, 2007

B. Operational Activity

Accredited to ISO 9002 standards, JICT aims to provide excellence service through the dedication of the workforce and the application of proven and reliable technology to its operation. At JICT, the main service delivery is conducted in Planning, Operation and Billing department. There are also Marketing, Customer Care and Legal units that have daily activities with customers. Following is the general procedure of activities in Planning and Operation units: (The workflow of standard operation procedure in Operation, Planning and Billing unit attached to this thesis in Appendix 3.2;3.3;3.4)

C.1 Planning Unit

In Planning unit, there are 2 (two) main activities, as follows:

1. Inbound Process

   Inbound process is an activity of planning the container discharged from vessel onto the container yard. The process is started when Account staff (under Marketing unit) receives documents from shipping lines via email. The documents are:

   - List of vessel schedule
   - Master Cable from Ship Master
   - Container Vessel Identification Advice (CVIA)
   - Discharge Plan
   - Bay Plan
   - Container Reefer list
   - Dangerous Goods list
   - Re-stow and Shifting list
   - Transshipment list
   - Special stowage request

   Account Staff verifies above documents and sends to Planning unit. At the same time, Berth Administration Support uploads EDI Baplie

Inbound from Shipping Line's central planner and prints Import Cards and Hatch Prints. Ship Planning Manager conducts meeting with Account Staff, Duty Operation Manager, and Engineering Manager to finalize the berthing arrangement for the particular vessel. The result of meeting contents are the man power requirements for vessel operation, equipment plotting (quay cranes, RTGCs, head trucks), and the berth number for operation. Based on meeting result, all units involve following up the sequences. Yard Planning Manager plots the area for container yard block to accommodate the discharged containers from the vessel. Finally, Account Staff sends the meeting result to shipping lines in conforming the berth allocation and equipment deployed for its vessel.

2. Outbound Process

Outbound process is an activity of planning the containers to be loaded onto vessel from container yard. The process is started after Account staff receives documents from Shipping Lines via email maximum 24 hours before the vessel berthing at the quay. The documents are as follows:

- Reefer list
- Dangerous cargo list
- Container over dimensions
- Shifting list
- Transshipment list

Account Staff verifies above documents and sends to Planning unit. Ship planning staff prepares Loading Plan based on Pre-stowage from Shipping Lines. Yard Planning prepares allocation at container yard for receiving containers in the form of Export Lay-Out and records in the system. After all documents are ready, Ship Planning sends the preliminary loading plan to shipping lines. When the vessel is ready for loading, Ship Planning is onboard the vessel to get approval on the loading plan from Chief Officer. If Chief Officer agrees, Operation can start the loading operation. If Chief Officer

doesn't agree, Ship Planning will amend the loading plan until Chief Officer approves. Final loading plan will be sent by Ship Planning to Chief Officer and Shipping lines 2 (two) hours before the vessel operation is completed.

C.2 Operation Unit

In Operation unit, there are 2 (two) main activities, as follows:

1. Discharging Process

   Discharging process is an activity of discharging the containers from vessel onto container yard. The detail process is when Control Tower staff delivers the documents and HHT (Hand Held Terminal) to Berth Foreman to execute the discharging process. Berth Foreman controls the vessel berthing to the quay position and coordinates with Chief Officer to start the discharging process. Then, he instructs the labour to open container lashing in the vessel. Ship Operator checks containers which will be discharged based on Crane Working Program (CWP) and Colour Mini Plan (CMP). He guides the QC operator to start discharging the containers. QC operator discharges the container and puts on chassis based on CMP. Berth Officer checks physical container and records the data into HHT. After discharging process finished within 1 (one) shift, Berth Officer makes Report of Discharging Realization in the Time Sheet and hands over to the next shift. Head Trucks operator brings the container from quay side to be grounded in the container yard. Yard Officer reconciles the container number that will be stacked with the one mentioned in the Import Cards. If the information is valid, he will record in the Time Sheet Report. Operator RTGC lifts off the container and stacks in container yard based on instruction from Yard Officer. Finally, Operation Administration Officer compiles all the data from Time Sheet Report and verifies based on hatch print, CWP and CMP, in order to issue the Loading-Unloading Realization Report as the basic document to issue the invoice to Shipping Lines.

2. Loading Process

Loading process is an activity of loading the containers onto vessel from container yard. The process starts when Berth Foreman informs Control Tower Staff, Berth Operator, and QC Operator to start loading process. Control Tower Staff informs Yard Foreman to prepare loading activity and sends data via system (HHT). Yard Foreman instructs RTGC Operator to position in the particular block based on Hatch Print. Yard Officer informs RTGC Operator to lift off the container onto chassis. After all the containers for particular vessel lift off onto chassis, Yard Officer makes Time Sheet Report. Head Truck operator carries the container to quay side to be loaded onto vessel. Berth Operator accepts the container from Head Truck Operator and checks the container number, condition, designated vessel, port of destination and weight to be confirmed with Loading Hatch Print. QC Operator lifts off the container onto vessel guided by Ship Operator using Loading Plan and Hatch Print. Ship Operator checks all the container after loading and makes report to Control Tower. He also records the data in HHT for any container being loaded. Control Tower updates container location in the system based on report from Ship Operator. Operational Administration makes Loading-Unloading Realization Report based on hatch print, CWP and CMP, as the basic document to issue the invoice to Shipping Lines.

C.3 Operational Productivity

Operation is a transformation process in which transforming company input become an output to the customers. To see how effective, the operational process at JICT, the author provide statistical data (secondary data) of JICT Productivity using the standard operational productivity level in container terminal. To understand the operation performance at JICT, below the author puts definition, and formula of measuring operational productivity, as follows:

1. Terminal Production
   a. Container Throughput : total containers loaded and discharged from vessels that departed from the terminal in the defined period.

      Formula: includes over dimensional containers; excludes un-containerized cargo, re-stowage and shifting containers, gate movements from water.

      1. Moves = Container Throughput in moves
      2. Teus = Container Throughput in Teus
      3. Local (Import & Export) in % = Import & Export container throughput in Teus proportion.
         Formula = Import + Export container throughput in Teus divided by total container throughput in Teus.
      4. Transshipment in % = Transshipment container throughput in Teus proportion.
         Formula = Transshipment container throughput in Teus divided by total container throughput in Teus.
      5. Number of Container Vessel Calls = Total vessels carrying containers departed in the defined period.

2. Quay Side Operation
   a. Vessels
   1. Gross QC Rate (mph) = Total moves by quay cranes divided by all quay cranes operating time.
      Formula = (Discharge + Loading + Re-stow + Shifting + Hatch Cover) divided by Quay Cranes operating time for all container vessels departed from the terminal in the defined period minus total quay crane delay time NOT accountable to terminal operator
   2. Vessel Operating Time (mph) = Total moves divided by total container vessel operating time.
      Formula = (Discharge + Loading + Re-stow + Shifting + Hatch Cover) divided by vessel operating time for all

container vessels departed from the terminal in the defined period

3. Berth Productivity (mph) = Total moves divided by total container vessel berthing time (i.e. ATB – ATD).
   Formula = (Discharge + Loading + Re-stow + Shifting + Hatch Cover) divided by vessel berthing time for all container vessels departed from the terminal in the defined period
4. Vessel Moves = Total moves for container vessel operations.
   Formula = (Discharge + Loading + Re-stow + Shifting) for all container vessels departed from the terminal in the defined period.
5. Berth Occupancy (%) is the percentage of berth being occupied.
   Formula = (Berth Length occupied x berthing hours) divided by (available berth hours x usable berth length) x 100%

3. Yard Operation
   a. Container Yard Density (%) is a container yard inventory on hand divided by available storage capacity of the container yard.
      Formula = total container yard inventory (Teus) divided by total available storage capacity of the yard (Teus) x 100%.
      Where available storage capacity = Blocks x Stacks x (Tier x Lane – Shuffling slots – any other slots for safety purpose) and shuffling slots in different blocks are different from different cranes used that varies from terminals and should be based on individual terminal usage.
   b. YC Rate (mph) is total yard crane moves divided by crane manned hours.
      Formula = total yard crane moves divided by yard crane manned hours (i.e. sign off time – sign on time)
      Note: when the yard crane manned hours span across the cut off time (23:59 pm), the number of crane moves and manned hours prior to (23:59 pm) will be counted for the previous period, and those after 23:59 pm will be counted for the next period.

c. YC Utilization (%) is the percentage of yard cranes being used.
   Formula: total yard crane manned hours divided by yard cranes available time in the period.
   Where yard cranes available time – 24 hrs a day x number of yard cranes x number of days in the defined period – maintenance hours.
d. Dwell time (days) is average number of days a container staying in the container yard.
   Formula: total dwell time of containers divided by total number of containers for all status (including empty pool containers).
   Where dwell time = container departure time – container arrival time.
   Container Departure time = gate out confirm time for import container or vessel loading confirm time for export and transshipment containers.
   Container arrival time = vessel discharge confirm time for import and transshipment containers or gate in grounding yard confirm time for export containers.

4. Gate Operation
   a. Container Gate moves is number of in-gate container movements created and confirmed at the terminal gate house including gate movements in depot.
   b. Tractor Gate Moves is number of in-gate external tractor at the terminal gate house including depot gate movements
   c. External tractor turn round time of external tractors spent in the terminal per tractor.
      Formula = total turn round time of external tractors spent in the terminal divided by total number of tractors that departed the terminal in the given time.

5. Overall Customer Service
   a. Vessel waiting time per Vessel Call (hr) is the average berthing delay time per vessel.

Formula = The total berthing delay time of vessels due to the terminal divided by the number of vessels departed in the defined period.

b. Percentage of Delayed Vessel is berthing delay which is defined as delays occurred between agreed ETB and confirmed time of berthing with delay reason due to the terminal.

   Formula = Number of delayed container vessels due to the terminal divided by total number of container vessels departed in the defined period.

c. Percentage over 2 hours (against total vessel calls) is percentage of vessels that the waiting time is over 2 hours against total vessel calls.

   Formula = Number of vessels that have total waiting time > 2 hours, divided by total number of container vessels departed from the terminal in the defined period.

d. Percentage over 2 hours (against total delayed vessel calls) is percentage of vessels that the waiting time is over 2 hours against total delayed vessel calls.

   Formula = Number of vessels that have total waiting time > 2 hrs, divided by total number of delayed container vessels departed from the terminal in the defined period.

JICT performance is compiled on daily basis by the Operation Team and reported to Data & Information unit under Commercial Department. Data & Information Unit produces JICT Statistics Report on monthly basis and distributes to Pelindo II and HPH in Hong Kong.

Operational productivity is important for Management as a basic information to make a forecast for container production in the whole year at JICT. This forecast is used to calculate the cost for man power, equipment plotting, fuel cost for equipment and other necessary cost for producing the services. This operational productivity along with the forecast for container production is also used by Management to make a

judgment whether JICT needs to expand the yard and add equipment in some period of time.

Referring to the previous definition, below is the data of JICT operation productivity for year 2004,2005, 2006, 2007:

Table 3-2

JICT Operation Productivity Year 2004 - 2007

No		2004	2005	2006	2007
	Terminal Production				
1.	Vessel call	1.651	1.701	1.900	1.874
2.	Throughput (Teus)	1.623.065	1.470.468	1.619.495	1.821.294
	Productivity				
1.	BCH (Move)	22.60	27.94	28.11	27.60
2.	VOR (Move)	37.74	45.53	45.70	44.30
3.	BSH (Move)	33.43	35.59	35.32	33.20
4.	YOR (%)	53.10	52.24	56.19	50.70
5.	BOR (%)	57.44	45.26	49.63	59.60
6.	Waiting Time	1.79	0.62	0.33	0.59

Source : JICT MIS Report year 2004 & 2005 & 2006 & 2007

Based on the above table, the ratio of Box Crane per Hour (BCH) increased 22% from only 22.60 in 2004 up to 27.60 in 2007. Vessel Operating Ratio (VOR) also improved 17% from 37.74 in 2004 up to 44.33 in 2007.

From 6 (six) indicators of productivity as described in the above table, JICT has improved its service level for several years even the throughput volume growing quite significantly from year 2006. This indicates that JICT can perform effectively in its production and contributes to better service level to the customer compare to the previous years.

D. Customer

A key challenge for any service business is to deliver satisfactory outcomes to its customers in ways that are cost-effective for the company. If customers are dissatisfied with the quality of service, they won't be willing to be a loyal customer or even change its direction to try other place if competitors offer better quality. It is a widely accepted notion that customers are the best judges of the quality of a service process and its outcome.

As a container terminal, JICT has two type of customer, which are Direct Customer (Shipping Lines) and Indirect Customer (Importer, Exporter, Forwarders). In term of business relation, JICT signs Contract Agreement only with Shipping Lines.

Majority of JICT customers are Shipping Lines that runs Feeder Service (route: Jakarta – Singapore, Jakarta – Malaysia) and Intra Asian Carrier (route: covering ports in Japan, Korea, Taipei, Thailand, Vietnam, China, Hong Kong), and Direct call services (route: covering ports in Colombo, European ports, Africa, and Middle East ports). At JICT, all customers either they are the biggest carrier bringing higher volume than other customers, are paying the same standard tariff of stevedoring that already stipulated by Government through a decree from Indonesia Port Corporation II (SK Tarif). In fact, other ports in Tanjung Priok have different scheme of tariff based on their contractual agreement with Shipping Lines which mostly offer lower rate than what JICT charge to its customers. Thus, it depends on the customers (shipping lines) to determine where they want to put their business. The primary reason for Shipping Line to choose the container port is the operational service level, facilities and infrastructure, IT system and networks. In some circumstances, Shipping lines are dictated by their importer or exporter on which preferred port they want to be served. Their consideration is mostly on the security and safety requirements.

Since year 2004, JICT has received a compliance certificate on ISPS code from International Agency. This certificate is actually an entry ticket for container and cargo to enter US and Europe territory. Below is JICT throughput for 5 (five) years per shipping lines' volume:

Table 3-3

Throughput of JICT per customer for year 2003-2007

NO	SHIPPING LINES	2003 TEUS	2004 TEUS	2005 TEUS	2006 TEUS	2007 TEUS
1	APL	206,904	242,821	242,432	275,693	269,112
2	MAERSK	159,801	0	2,617	208,579	261,301
3	CMA	101,604	173,577	125,694	166,665	191,639
4	EVERGREEN	87,781	108,833	112,348	127,433	176,667
5	NYK	69,586	89,297	87,038	96,830	102,838
6	K LINE	25,744	58,602	68,124	72,273	100,994
7	PIL	65,311	73,848	65,089	72,098	77,636
8	COSCO	47,009	57,059	43,708	56,466	71,719
9	SAMUDERA INDONESIA	208,138	216,262	90,246	68,436	69,315
10	YML	65,845	77,253	87,618	70,922	67,389
11	WHL	101,976	108,873	92,600	78,739	66,807
12	CSCL	0	5,937	32,840	64,191	63,527
13	RCL	58,608	7,463	27,647	37,417	57,489
14	CNC	43,597	25,747	37,941	48,072	41,408
15	HEUNG-A	18,191	27,365	47,122	9,101	38,167
16	SEACON	0	0	3,883	18,754	36,784
17	HANJIN	4,250	16,413	29,148	16,497	23,897
18	MOL	0	0	763	18,725	20,505
19	SYMS	0	0	0	19,862	17,813
20	TMS	11,009	49,068	82,827	36,792	35,686
21	Meratus	0	0	1,758	2,812	3,669
22	IRL	0	2,644	4,072	1,067	2,495
23	Hub Line (move to other terminal)	6,978	13,642	3,104	0	0
24	Panurjwan	1,085	2,658	0	0	0
25	Hyundai Merchant Marine (vessel withdr	2,187	0	0	0	0
26	MSC (run in other terminal)	4,058	795	0	0	0
27	New Econ Line (move to other terminal)	56,161	63,825	0	0	0
28	Toyo Fuji Shipping (withdrawn from Indo	9,792	17,085	4,236	0	0
29	NORASIA (move to other terminal)	0	2,576	11,142	0	0
30	Jardin (terminate its service)	0	0	3,233	0	0
31	STX Pan Ocean (withdrawn from Indones	0	0	7,600	0	0
32	OOCL (move to other terminal)	0	0	18,065	7,071	9,950
33	DONG NAMA (withdrawn from Indonesia	56,992	50,616	33,775	25,981	0
34	P&O (Acquisition by Maersk Line)	0	19,995	64,025	12,240	0
	Total Others T/S	395	1,090	0	4,052	0
	Total OTHERS	89,883	110,396	39,774	2,352	14,485
	TOTAL THROUGHPUT	1,502,883	1,623,739	1,470,467	1,619,120	1,821,292

Source : JICT Annual Customer Report, 2007

Based on Table 3-5, JICT throughput surged up to 8% from year 2003 to 2004 due to the high increase of its big 5 (five) customers, which are APL, Samudera Indonesia, CMA CGM, Evergreen & Wanhai Lines. On year 2004, Maersk Line moved its service to PT. Multi Terminal Indonesia (MTI) with total movement around 150,000 Teus per year. The strategy of Maersk at that time was cost saving due to the lower stevedoring rate at MTI than JICT, and Maersk deployed smaller vessels in Jakarta loop.

Year 2005 became a difficult year for JICT as the throughput went down 9.4%. The main reason is due to Samudera Indonesia moved more than 50% of its business to Mustika Alam Lestari Terminal (MAL). While at the same time, some Intra Asian carriers at JICT lost their market share to other terminals at Tanjung Priok. Though some shipping lines still maintained their performance, JICT throughput in 2005 was the lowest throughput ever after the privatization process in 1999.

After long discussion and negotiation with Maersk in year 2006, JICT finally succeded to bring Maersk back to the terminal and recorded at more than 200,000 Teus in year 2006. The trend to deploy big vessels has pushed Maersk to choose JICT as its terminal due to draft limitation at MTI. The growing need to utilize IT system in data exchange was also an advantage for JICT in getting potential services. Correlates with the improving economic situation in Indonesia, JICT recorded a 12% throughput increase from 2006. High import volume to Indonesia contributed to a 23% increased in term of Teus at JICT comparing 2006 versus 2007 while export was only recorded a slightly increased at 7%. As mentioned in the first chapter that international trade will grow following the GDP growth, JICT should prepare itself to cope with the growing volume and anticipate the changes.

E. Market Share

In Tanjung Priok (Jakarta ports), JICT has been a majority terminal in terms of container handling throughput, below is the figures of market share at Tanjung Priok ports throughput for the year 2003-2007:

Table 3-4

Port of Tanjung Priok Throughput Year 2003-2007

Container Terminal	Volume in Teus					Market Share
	2003	2004	2005	2006	2007	Year 2007
PT. JICT	1,503,000	1,623,000	1,470,000	1,619,000	1,821,000	62%
Koja Container Terminal	543,000	559,000	573,000	583,000	705,000	24%
PT. Multi Terminal Indonesia	137,000	262,000	297,000	223,000	135,000	5%
PT. Mustika Alam Lestari	119,000	106,000	246,000	239,000	275,000	9%
Total volume of Tanjung Priok Ports	2,302,000	2,550,000	2,586,000	2,664,000	2,936,000	

Source: JICT Customer Report year 2007

Koja Container Terminal is a joint operation between PT. Ocean Terminal Petikemas (holds 47.88% shares) and Indonesia Port Corporation II (holds 52.12% shares) started its operation since 1998 for 20 years operation. Koja primary customer is NYK, OOCL, KMTC, Gold Star, Dong Nama, MSC, and Hyundai. JICT and Koja have made an arrangement to allow their containers moving between their terminals to connect the transshipment container. This flexibility has created more transshipment volume to both terminals as shipping lines sometimes carrying cargo that need to be connected onto vessel in JICT.

PT. Multi Terminal Indonesia (MTI) is a subsidiary of Indonesia Port Corporation II with 99% shares whilst the other 1% owned by Koperasi Pegawai Maritim (Kopegmar). MTI primary customer is New Econ Line, PACC, New Ship, and Hub Line. MTI has constraints on draft which restricts vessel calling at this terminal to only call at maximum -8.5 metres.

PT. Mustika Alam Lestari (MAL) is a company that entered into joint operation agreement with IPC II to run a container terminal within certain period of time. MAL primary customer is Samudera Indonesia, New Econ Line, Hub Line and OOCL. MAL actually has sufficient draft for deeper vessel calling at its terminal but the restriction is on not having enough yard for container stacking.

Table 3-5

Competitor Landscape:

	JICT			MTI	MAL	Koja
	T1 North	T1 West	T2			
Number of Berth	4	2	2	2	1	3
Quay Length	600 m	900 m	510 m	404 m	258 m	650 m
Depth	-14 m	-10 to 12 m	-8.5 m	- 8 m	-12 m	-14 m
Number of Quay Crane	5	8	3		2 + 2 HMC	6
Number of RTG Crane	40		11	11	5	20

Source: JICT Customer Report year 2007

F. Benchmarking

Benchmarking is a process of comparing and measure an organization process or internal business process to an organization that has the best practice in the same industry. Gregory H. Watson (1996) mentions that benchmarking is a process in finding the best practice simultaneously to improve the performance of a company.

In this thesis, the author selects a benchmark to neighboring port in Malaysia, West Port, as it has been voted among the top 10 ports in Asia and also that West Port is one of HPH (Hutchison Port Holdings) ports in Asia (HPH holds 30% share of West Port).

Westports Malaysia (KMT) is an integrated facility occupying 587 hectares of waterfront land in Port Klang, which connects to over 300 destinations worldwide. Westports has a deep-water facility and is strategically situated on the Straits of Malacca, which is closely linked to Malaysia's largest and most concentrated industrial region by road and rail. This accessibility, combined with comprehensive facilities for containers, break bulk, dry bulk, liquid bulk, ro-ro and other cargo, make Westports a major load center for Southeast Asia.

Westports is well-known in the industry for its high productivity level and state of the art infrastructure, including super Post Panamax tandem-lift quay cranes with over 60 metres of outreach. Westports also benefits from an advanced computer network that links all of its operations.

In 13 year history, Westports has proven itself in terms of efficiency and reliability with its shipping lines. Its waterfront reliability, distinctive stevedoring capabilities and versatility in handling of cargo, has made Westports well recognized as an outstanding national contribution to Malaysia and well acclaimed as a remarkable performance in the international scene.

Table 3-6
Westports Key Facts

Total Land Area	1450 acres
Length of Berth	11 km (when fully developed)
Terminal Capacity	6 million Teus per annum
Container Yards	220 acres
CFS	200,000 sq ft
Distripark 1	500,000 sq ft
Distripark 2	200,000 sq ft
Warehouses	230,000 sq ft (break bulk) 120,000 sq ft (Dry bulk)

(Source:http//www.westportsmalaysia.com)

Table 3-7

Westports Container Operations

Infrastructure & Equipment

Terminal	Infrastructure & Equipment
Berth Length	9 berths 2600 meters
Equipment	28 quay cranes 77 RTGs 230 Prime movers & Trailers 18 Stackers 700 Refeer points
Additional Features	15 meter berth depth Ability to accommodate 6th generation container vessels

(Source:http//www.westportsmalaysia.com)

Table 3-8

Westports Throughput year 2005, 2006, 2007 (until September)

In Teus

Year	Local	Transshipment	Total
2005	949,288	1,777,916	2,911,270
2006	1,068,717	2,322,422	3,665,201
2007	1,238,450	2,764,469	4,312,717

(Source:http//www.westportsmalaysia.com)

In this thesis, the author made a benchmarking of operational productivity between JICT and Westports using data year 2007.

Table 3-9

Matrix Benchmarking Westports & JICT, Year 2007

	JICT	Westports
Gross Quay Container Rate (mph)	28	32
Vessel Operating Rate (mph)	44	63
Berth Productivity (mph)	33	50
Container Yard Density (%)	50%	70%
Record breaking moves (Vessel Operating Rate)	120 Using 4 QC's	227 Using 6 QC's

(Source:http//www.westportsmalaysia.com, HPH Sales Report, 2007, JICT Annual Report, 2007)

Based on the table above, the operational productivity of Westports is above JICT standard. The primary reason is Westports larger than JICT in terms of number of equipment, the area of yard facilities and sufficient supporting facilities such as warehouse, multipurpose ports (break bulk & dry bulk), in which JICT doesn't have in its premises.

G. Organization

G.1 Organization Structure

PT. Jakarta International Container Terminal is located in Jl. Sulawesi Ujung No.1, Tanjung Priok, Jakarta. Organization structure attached in Attachment 1.

G.2 Board of Directors

JICT is a joint venture between HPH and Pelindo II, so the Board of Directors consists of the representatives from each Shareholders.

- President Director (appointed by HPH) : Bambang Bhakti
- Commercial Director (appointed by Pelindo II) : Wisnu Pranoto
- Finance Director (appointed by HPH) : Derek Pierson
- Operation & Engineering Director (appointed by HPH) : Pak Sai Tak
- Human Resource & Administration Director (appointed by Pelindo II) : Suparyo

G.3 Management Team

Refer to JICT President Director Decree on January 31st, 2008, Management team consisted of:

1. Head of Department
   Head of Department is a strategic function that reports directly to Director, coordinates Senior Manager and Manager under his or her role, in accomplishing the unit's task & target.

2. Senior Manager
   Senior Manager is a strategic function that coordinates Manager under his or her role, and reports directly to Director, if there is no Head of Department position in his or her unit.

3. Manager
   Manager is a supervisory job, manages staff under his or her team and reports to Senior Manager.

G.4 Department Role

1. Commercial Department

   The role of commercial department covers the strategic function of marketing, sales, customer service and business development.

   Commercial department comprises of 3 (three) units:

   a. Marketing unit
   b. Business Development unit
   c. Customer Care unit

2. Finance Department

   The role of Finance department covers the strategic function of financial accounting, accounting services and supply chain unit.

   Finance department comprises of 3 (three) units:

   a. Financial Accounting unit
   b. Accounting Services unit
   c. Supply Chain unit

3. Operation and Engineering Department

   The role of Operation unit covers the ship, berth and yard planning arrangement; operational activities in the ship, yard and gate; controlling and reporting; budgeting man power and costing. While Engineering unit covers the activity of maintenance & repair of equipment, berth and yard facilities, building and site offices; planning & budgeting; controlling and reporting; and conducting expansion projects.

   Operation and Engineering department comprises of 7 (seven) units:

   a. Planning Effectiveness
   b. Operation Terminal 1
   c. Operation Terminal 2
   d. Operation & Engineering Development

e. Operation Support
f. Equipment & Workshop
g. Infrastructures & Facilities

4. Human Resource and Administration Department

The role of HRA department covers the strategic function of human resource development including promotion, recruitment, and training; handling office and employee services and safety and security of port facilities and building.

HRA department comprises of 3 (three) units:

a. Human Resource Development
b. Safety & Security
c. Office & Employee Services

5. President Director office

The role of President Director office covers the strategic function of ICT (Information & Communication Technology); corporate governance role; internal audit and public relation.

President Director office comprises of 4 (four) units:

a. Corporate Governance
b. Corporate Affairs
c. Internal Audit
d. Information & Communication Technology (ICT)

H. Human Resources

JICT employees consisted of permanent employee and outsourcing employee. In this thesis, the author will only use the permanent employee data for reference as the number of outsourcing employee is not fixed following the workload in the particular unit, such as Operation, Engineering, ICT, and Security.

H.1 Employee Position

Table 3-10

Employee Position

POSITION	GRADE	TOTAL
PERMANENT, DIRECTOR & EXPATRIAT		
Management		
Director		5
Expatriate non director/ Advisor		3
Senior Manager	Grade 14	15
Senior Manager	Grade 13	-
Manager	Grade 12	46
Manager	Grade 11	2
Sub Total Management		71
Non Management		
Sr Staff/ Spv	Grade 10	59
Sr Staff/ Spv	Grade 9	68
Staff	Grade 8	166
Staff	Grade 7	267
Jr staff	Grade 6	176
Jr staff	Grade 5	189
Non-Staff	Grade 4	12
Non-Staff	Grade 3	1
Non-Staff	Grade 2	-
Non-Staff	Grade 1	-
Sub Total Non Management		938
Total (Permanent + Director + Expatriat)		1,009
Total Permanent Employee		1,001

Source: JICT HRA Report year 2007

H.2 Training

Training is an activity that aims to improve employees' skill and or teaching the employee of specific technical job for the current requirement, while development is more focus on preparing the employee to be ready in the next assignment in the future. Training and development program have the objective to fill the gap between the employee skill and the job requirement, and also to enhance the

employee effectiveness in achieving the work target. According to Barry, 1994 (Husein Umar, 2005:13) training can be conducted because of:

- Change of staff
- Change of technology
- Change of job
- Change of regulation
- Change of economy
- New work pattern
- Market pressure
- Social policy
- Employee aspiration
- Performance variation
- Same of opportunity

Training can be conducted in the office (on-the job training) and outside office (off-the job training). In the office, training can be made as a demonstration (simulation of job), train the practical knowledge or work rotation, whilst outside office, training can be in the form of workshop, case study, certain project, and business gaming.

JICT gives opportunity for employee that meet the requirements to join training, workshop, seminar, or business trip, either locally or international. (Collective Labour Agreement, year 2007-2009:37).
JICT budgeted minimum US$ 1,000,- for each of employee in every year. JICT has the obligation to give a standard training to each of employee for computer skill and English course and also soft skills, in the form of leadership training and team building. In practice, each of department propose a training budget to HRA department including detail number of person, type of training, cost involved on yearly basis. This budget is reviewed by HRA department and final approval will be released from Finance Department considering the whole training budget at JICT.

Table 3-11

Number of Training and Number of Participant of Local and Overseas Training Year 2004 – 2007

No	Year	Local	Local	Overseas	Overseas
		# Training	# Participant	# Training	# Participant
1	2004	153	348	-	-
2	2005	146	882	8	15
3	2006	156	1,027	5	8
4	2007	170	1,039	9	12

(Source: JICT HRA Report, 2004,2005,2006,2007)

H.3 Level of Company Revenue per Employee

The level of Company Revenue per employee describes the level of productivity per employee on yearly basis. To get the data of level of company revenue per employee can be attained from Financial Report and Employee Database.

The formula is as follows: (Chandra Wijaya, 1997:20)

$$\text{Revenue per Employee} = \frac{\text{total Net Income}}{\text{Total number of employee}}$$

Hence, productivity per employee can be measured by using a formula of JICT Net Income divided by number of employee. It will then resulted to an average of revenue produced by each of employee.

H.4 Employee Welfare

The policy of remuneration is stipulated in Collective Labour Agreement, Article 26, which mention:

a. Company will ensure the employee that JICT remuneration will refer to the external competition market and attractive in retaining its employees.

b. Company will ensure that level of remuneration will be in line with the responsibility and job description of the employee, using the valid technical performance measurement.

c. Company will review the remuneration package based on COLA (Cost of Living Adjustment) in Indonesia at least on every March and will be stipulated retroactively to January based on remuneration structure that already negotiated between JICT management and Labour Union.

Article 27 stipulate the remuneration component, as follows:

1. Salary, consisted of:
   a. Basic Salary
   b. Housing Allowance
2. Incentives, consisted of:
   a. Transportation allowance
   b. Incentive
   c. Meal Allowance
   d. Annual Leave allowance
   e. Long Leave allowance
   f. Religious allowance
   g. 13th salary
   h. Bonus
   i. Overtime allowance
   j. Structural allowance

I. Innovation

Michael Treacy and Fred Wiersema,(Customer Intimacy and Other Value Discipline", 1993:.84-93), recently distinguished 3 (three) strategies that lead to successful differentiation and market leadership:

- Operational excellence: providing customers with reliable products or services at competitive prices and easy availability.

- Customer Intimacy: knowing customers intimately and being able to respond quickly to their specific and special needs.
- Product leadership: offering customers innovative products and services that enhance the customer's utility and outperform competitors' products.

JICT understands that the role of technology is becoming more crucial, thus requiring great efforts to justify investment in technology upgrading to meet the increasing needs of customer. To be the leader in container port business in Indonesia, JICT has invested a lot in its internal system and also for data exchange with customers. Herewith, is the list of IT innovation adopted by:

1. Data exchange with customer (shipping lines) using Electronic Data Interchange. EDI allows companies to place instantaneous, paperless transaction with customers. EDI is not only efficient, it also decreases the time needed to get the data to the customers because faster transaction and more accurate in data reliability compare to paper transaction.

2. SMS Tracking

3. Website (Internet), the internet has critical advantages over EDI with respect to information sharing

J. JICT Vision, Mission and Values

For many organizations, the Balanced Scorecard has evolved from a measurement tool to what Kaplan and Norton have described as a "Strategic Management System." While the original intent of the Scorecard system was to balance historical financial numbers with the drivers of future value for the firm, it then becomes a critical tool in aligning short-term actions with firm's strategy.

The Balanced Scorecard is ideally created through a shared understanding and translation of the organization's strategy into objectives, measures, targets, and initiatives in each of the four Scorecard perspectives. The translation of vision and strategy forces the management to specifically determine what is meant by often vague and nebulous terms contained in vision and strategy statements. To successfully implement any strategy, it must be understood and acted upon by every level of the firm. Cascading the Scorecard means driving it down into the organization and giving all employees the opportunity to demonstrate how their day-to-day activities contribute to the company's strategy.

In rapidly changing environments, it is required more than an analysis of actual versus budget variances to make strategic decisions. Referring to the above, it is urgently required for JICT to streamline its vision, mission and values to enable JICT reaching out its company objectives.

JICT Vision: To become a first class container terminal achieving international service standards.

JICT Mission:

- *Shareholder Value*:
  Achieving the maximum return to shareholders; steady growth & healthy profit
- *Customer Focus:*
  Creating new & keeping customers for expanding larger customer base
- *Operational Excellence:*
  providing fast, efficient, reliable services 24 hours a day, all year round, complying ISO 9002
- *Safe & Secure:*
  complying to IMO/ISPS without compromise
- *Organization Effectiveness:*
  building competent, skilled people and high motivated team

JICT Values:

- Integrity

  'Walk the talk' with honesty and commitment

  - Setting a good example to all
  - Be accountable to all actions
  - Be open with all facts
  - Uphold the code of conduct at all times
  - Be straight forward, with open and honest communication

- Customer Focus

  'Be There' for our customers

  - Energize the customers internal and external, productive but fun
  - Add value with every interaction
  - Be a solution provider
  - Make their day
  - Apply G.S.T (Greeting, Smile & Thank You)

- Achieving Excellence

  The excitement of achieving superior business results and stretching our capabilities beyond benchmarks

  - Always strive to look for better ways
  - Development of individual's true potential
  - Demonstrate persistence, perseverance, and determination
  - Commitment to continuous investment

- Responsive to Our People

  The valuing of diversity, enriched by openness, sharing, trust, teamwork and involvement

  - Be proactive in voicing your ideas and concerns
  - Respect others' opinions and differences
  - Be open to feedback and criticism
  - Be considerate of others' needs and backgrounds
  - Promote 'winning' through teamwork

- Enthusiasm

There are no limits, only obstacles to be overcome:

- o Be passionate
- o Choose own attitude and always fun
- o Embrace challenges
- o Face the facts and keep the faith
- o Accept failures, learn from them and improve