

The Integration Of Quality Management System ISO 9001: 2008 And Malcolm Baldrige Criteria For Performance Excellence (MBCfPE) At PT Petrokimia Gresik

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ABSTRACT

This research aims to analyze the implementation of the quality management system ISO 9001: 2008, Malcolm Baldrige Criteria for Performance Excellence (MBCfPE) as well as integration between ISO and MBCfPE in PT Petrokimia Gresik. The qualitative descriptive approach is used to analyze the implementation of ISO and MBCfPE, and the integration of the two management systems.

The object of this research is PT Petrokimia Gresik. The company is implementing both of the management systems to improve the performance of the company. This research was conducted by studying the documents and in depth interviews with the company staff.

The results of this research showed that the application of the ISO in PT Petrokimia Gresik has been in accordance with the requirements of ISO 9001: 2008 to manage processes that produce products according to the needs and expectations of customers. The study also shows that PT Petrokimia Gresik has been able to manage the work systems and work processes in accordance with the requirements of the Baldrige criteria to improve the company's performance from time to time.

The results of the research also showed that there is a relationship (integration) between ISO and Baldrige. The application of ISO proved to help the company in obtaining a high score on the implementation of the Baldrige especially Category 6: focus on operations. However, the integration of both management systems can not be proven through documents.

Key words: *Quality Management System ISO 9001:2008, MBCfPE, and Integration*

I. RESEARCH BACKGROUND

In the business world, competition between a company with another company can be done through various means. The most common way is through price, product or service differentiation, flexibility, delivery time, and quality. It can not be denied that quality has been the main requirement for the business success.

There are many existing quality management systems in the world. However, the quality management systems which are very often mentioned among others are Total Quality Management (TQM), Six Sigma, International Organization for Standardization (ISO), Balanced Scorecard and Malcolm Baldrige Criteria for Performance Excellence (MBCfPE).

The attention to the quality at the moment, especially if associated with manufacturing and services is a must. Quality is an important and urgent issue, because if the

company does not show the performance of the product quality and service when consumers demanded it, it will result in a switching consumers on products and services of other companies. The business competition encourages the emergence of market demands to the same quality standards as a tool in measuring the quality of the company. The same standards needed to provide a clear benchmark, how far the quality of service is given by the company than the quality given by a competitor. This has to be one of the strategies that can be applied by the company to indicate its existence in the world of business. The competitive strategy which could be applied by the company is the ISO (International Organization for Standardization).

According to Hilton (2005: 765) the main purpose of ISO 9001: 2008 is as follows:

- 1. The company should sustain the quality of the product or service at a level that continually meets the purchaser's stated or implied needs.*
- 2. The quality control system should be sufficient to give the supplier's own management confidence that the intended quality is being maintained.*
- 3. The supplying company should give the purchaser confidence that the intended quality is consistently achieved in the delivered product or service.*

With the implementation of the objectives of the ISO, the company performance will be required to be able to consider more appropriate steps in the implementation of the company's business. The application of ISO 9001: 2008 is expected to improve the company's performance to achieve company goals obtaining maximum income, whether derived from operational activities or non operational activities.

The ISO system directs how the company consistently meets the standards established pursuant to the policy and procedures for quality and quality audit periodically. Later the problem happens related to the ISO includes: First, the company which obtained ISO certification should be audited every year in order to consider the company consistency in the implementation of standards; Second, the standard or quality system established for one company may be different from other similar companies; and Third, lots of going on ISO certification obtained for the company/business unit specific only and not for the whole sections/business units of the company. In other words, it still remains difficult to conclude that companies having earned ISO have superior performances.

The various criticisms of the weakness of some methods or management tools time to time seems to be answered by the Malcolm Baldrige Criteria for Performance Excellence (MBCfPE) or in this paper called as Baldrige. The Baldrige is already used by a thousand of companies in the United States since 1987 with the purposes to improving competitiveness and performances. The Baldrige criteria is used in assessing performance in a wide range of key business indicators such as: customers, products and services, financial, labor and operational. Baldrige can help the company align its resources, improve its communication, productivity, effectiveness and achieve their strategic goals.

The performance improvement of the State-Owned Companies is expected to able to provide their positive contribution to the government and give impacts of their capabilities to generate profits. PT Petrokimia Gresik (PTPG) is a company producing various kinds of fertilizer and chemicals. As a part of the Stated-Owend Companies, PTPG is claimed to be the best in the business environment both regionally, nationally and internationally. The steps that should be performed by the company is implementing the quality management systems. The Management systems being applied by PTPG are among other things as follows: quality management system ISO 9001:2008, environmental management system ISO 14001,

management system Standard Permenaker K3 05/1996 and MBCfPE (Malcolm Baldrige Criteria for Performance Excellence) or Baldrige.

Based on the above matter, the objective of this research is to analyze The integration of quality management system ISO 9001: 2008 and Malcolm Baldrige Criteria for Performance Excellence (MBCfPE) at PT Petrokimia Gresik.

II. LITERATURE REVIEW

The cornerstone of the theory in this research is divided into several sub chapters as follows:

2.1 ISO Standards

ISO is a standard published document with the technical specification or criteria designed to be used as a guideline or rule in order to increase reliability and effectiveness of any product, service or activity (British Standard Institution, 2013). According to Zuckerman (1997) in Adhikari (2010), the development of standards results from either market demands, government imposed regulations or any voluntary consensus. ISO explores the interests of producers, consumers, governments, and the scientific community and formulates the international standards through the technical committees by gathering consensus among the member countries (Zuckerman, 1997 in Adhikari, 2010). ISO standards serve as technical agreements providing framework for compatible technology and are applicable across the globe.

2.2 ISO 9001:2008 Standard

ISO 9001: 2008 is an international standard for quality management system/quality. ISO 9001: 2008 specifies requirements and recommendations for the design and assessment of a quality management system. ISO 9001: 2008 is not a standard product, because it does not state requirements that must be met by a product (goods or services). ISO 9001: 2008 standard only is quality management system. Yet, however it is expected that the resulting product of an international quality management system, will be of good quality (standard). The ISO Clauses are shown in a table below:

NO	Clause	
1	Scope	
	1.1	General
	1.2	Application
2	Normative Reference	
3	Terms and Definitions	
4	Quality Management System	
	4.1	General Requirements
	4.2	Documentation Requirements 4.2.1 General 4.2.2 Quality Guidelines 4.2.3 Document Control 4.2.4 Quality Recording
5	Management Responsibility	
	5.1	Management Commitment
	5.2	Customer Focused
	5.3	Quality Policy
	5.4	Planning

		5.4.1 Quality Targets 5.4.2 Planning Of The Quality Management System
	5.5	Responsibility, Authority and Communication 5.5.1 Responsibility and Authority 5.5.2 Management Representative 5.5.3 Internal Communication
	5.6	5.6.1 General 5.6.2 Input Review 5.6.3 Output Review
6	Resource Management	
	6.1	The Provision Of Resources
	6.2	Human Resources 6.2.1 General 6.2.1 Competence, Awareness and Organizations Training must:
	6.3	Infrastructure
	6.4	The Work Environment
7	Realization Of Products	
	7.1	Planning Of Product Realization
	7.2	Processes associated with customer 7.2.1 Determination of product Requirements 7.2.2 Review of requirements related to the product 7.2.3 Communication with customers
	7.3	Design and Development 7.3.1 Planning, Design and Development 7.3.2 The design and development input 7.3.3 The outputs of design and development 7.3.4 Review of design and development 7.3.5 Design and Development Verification 7.3.6 Development and Design Validation 7.3.7 Design and Development Changes Control
	7.4	Purchase 7.4.1 Process Purchase 7.4.2 Purchase Information 7.4.3 Verification of purchased product
	7.5	Production and Service 7.5.1 Production and Service Control 7.5.2 Validation of Production Processes And Services 7.5.3 Identification and Be Able To Search 7.5.4 Customer Property 7.5.5 Product Maintenance
	7.6	Control, Monitoring and Measurement Equipment
8	Measurement, Analysis and Improvement	
	8.1	General
	8.2	Monitoring and Measurement 8.2.1 Customer satisfaction 8.2.2 Internal Audit 8.2.3 Monitoring and measurement of Processes 8.2.4 Monitoring and measurement of Product

	8.3	Control of products which do not comply
	8.4	Data Analysis
	8.5	Improvement 8.5.1 Continuous Improvement 8.5.2 Corrective Actions 8.5.3 Preventative Action

2.3 Malcolm Baldrige National Quality Award

Malcolm Baldrige National Quality Award (MBNQA) also known by MBCfPE and called by Baldrige is the quality Award of USA to appreciate the achievement of excellent quality management being held every year. . This award is established the US Congress in 1987 to commemorate the former Secretary of Commerce namely Malcolm Baldrige, and to drive the quality improvement for all industries of America. This award is not only given to certain products or services. Three awards are given every year for each category: manufacture, service, small scale industry, education, and health.

The best performance criteria of Baldrige is its framework which can be used by an organization to improve its quality. The seven categories being used as the performance criteria are as follows:

NO	MALCOLM BALDRIGE CATEGORY & CATEGORY DESCRIPTION
1	<p>Leadership The Leadership Category examines how the organization Senior Leaders' personal Action guide and sustain its organization. Also examined the organization Governance system and how the organization fulfills its legal, ethical, and societal responsibilities and its key supports its key communities.</p>
	1.1 Senior Leadership
	1.1.a Vision, Values, and Mission
	1.1.b Communication and Organizational Performance
	1.2 Governance and Social Responsibility
	1.2.a Organizational Governance
	1.2.b Legal and Ethical Behavior
	1.2.c Societal Responsibility and Support of key communities
2	<p>Strategic Planning The Strategic Planning category examines how your organization develops strategic objectives and action plans. Also examined are how your chosen strategic objectives and action plans are implemented and changed if circumstances require, and how progress is measured.</p>
	2.1 Strategy Development
	2.1.a Strategy Development Process
	2.1.b Strategic Objectives
	2.2 Strategy Implementation
	2.2.a Action Plan Development and Deployment
	2.2.b Performance Projection
3	<p>Customer Focus The <i>Customer</i> Focus category examines how your organization engages its customers for long-term marketplace success. This engagement strategy includes how your organization listens to the voice of its customers, builds customer relationships, and uses customer information to improve and identify opportunities</p>

	for innovation.
	3.1 Voice of the Customer
	3.1.a Customer Listening
	3.1.b Determination of Customer Satisfaction and Engagement
	3.2 Customer Engagement
	3.2.a Product Offering and Customer Support
	3.2.b Building Customer Relationship
4	<p>Measurements, Analysis and Knowledge Management The Measurement, Analysis, and Knowledge Management category examines how your organization selects, gathers, analyzes, manages, and improves its data, information, and knowledge assets and how it manages its information technology. The category also examines how your organization uses review findings to improve its performance.</p>
	4.1 Measurement, Analysis, and Improvement of Organizational Performance
	4.1.a Performance Measurement
	4.1.b Performance Analysis and Review
	4.1.c Performance Improvement
	4.2 Management of Information, Knowledge, and Information Technology
	4.2.a Data, Information, and Knowledge Management
	4.2.b Management of Information Resources and Technology
5	<p>Work Focus The <i>WorkforCe</i> Focus category examines your ability to assess workforce capability and capacity needs and build a workforce environment conducive to high performance. The category also examines how your organization engages, manages, and develops your workforce to utilize its full potential in alignment with your organization’s overall mission, strategy, and action plans.</p>
	5.1 Workforce Environment
	5.1.a Workforce Capability and Capacity
	5.1.b Workforce Climate
	5.2 Workforce Engagement
	5.2.a Workforce Performance
	5.2.b Assessment of Workforce Engagement
	5.2.c Workforce and Leader Development
6	<p>Operation Focus The Operations Focus category examines how your organization designs, manages, and improves its work systems and work processes to deliver customer value and achieve organizational success and sustainability. Also examined is your readiness for emergencies.</p>
	6.1 Work System
	6.1.a Work System Design
	6.1.b Work System Management
	6.1.c Emergency Readiness
	6.2 Work Processes
	6.2.a Work Process Design
	6.2.b Work Process Management
7	<p>Result The results category examines your organization’s performance and improvement in all key areas—product and process outcomes, customer-focused outcomes,</p>

	workforce-focused outcomes, leadership and governance outcomes, and financial and market outcomes. Performance levels are examined relative to those of competitors and other organizations with similar product offerings.
	7.1 Production and Process Outcome
	7.1.a Customer-Focused Product and Process Results
	7.1.b Operational Process Effectiveness Results
	7.1.c Strategy Implementation Results
7.2	Customer Focus Outcomes
	7.2.a Customer-Focused Results
7.3	Workforce-focused Outcomes
	7.3.a Workforce Results
7.4	Leadership and Governance Outcomes
	7.4.a Leadership, Governance, and Societal Responsibility Results
7.5	Financial and Market Outcomes
	7.5.a Financial and Market Results

III. RESEARCH METHODOLOGY

3.1. Research Methods

This research is conducted using the qualitative method with critical ethnography approach. It focuses on efforts to analyze and describe the implementation of the quality management system ISO 9000: 2008, Malcolm Baldrige Criteria for Performance Excellence (MBCfPE), and and their integration as implemented at PT Petrokimia Gresik. In attempt to analyze this case, the researcher thinks that this issue is more directly approached by using qualitative method, so it can be easily analyzed and described as well as to identify the constraints encountered with reference to theories and facts

Creswell (1998: 15) defined a qualitative research as follows: ” *Qualitative research is an inquiry process of understanding based on distinct methodological tradition of inquiry that explores a social human problem*”. The qualitative approach in a descriptive research is a research approach which sees the real conditions on the investigated objects without doing any interventions.

Sukoharsono (2006) defined critical ethnography as follows, “ *critical ethnography is the research method which critically describes the system and social groups. This method is resulted from dialectical processes, happening at a growing point of dissatisfaction upon the societal such as social classes, patriachat and socialists, so that human being as the social actors do not take part. The ones that take part are the representation of the class and race.*” The researcher uses critical ethnography approach because in analyzing the data this approach uses descriptive technique which makes it easy for the researcher to explain the research finding.

3.2. Location of Research

The research location is on Gresik Regency of East Java province and the place or object of the research is the fertilizer company PT Petrokimia Gresik. PT Petrokimia Gresik was once a Stated-Owned Company, but after being held a realignment by Stated-Owned Company Minister to synergize the fertilizer factories in Indonesia, then the company is no longer a Stated-Owned Company but a subsidiary under the PIHC (Pupuk Indonesia Holding Company). PT Petrokimia Gresik is a subsidiary of Stated-Owned Company, bearing in mind that this company is the most complete send largest fertilizer producer in Indonesia. PT

Petrokimia Gresik was selected as an object of research because the company has been implementing some management systems to improve its performance. Two management systems becoming the focus of research are the Quality Management System ISO 9001: 2008 and Baldrige. This two management systems are being applied by the company to manage its business activities.

3.3. Research Focus

The importance of qualitative research focus is the field study and research. According to Sugiyono (2006: 233), "The problem limit in qualitative research is called the focus, which contains subject matter that is common". In the absence of a focus research, the researcher will be stuck on high volume data acquired in field. Therefore, the focus of research comes with a very important role in guiding and directing the course of the research.

Through the research focus, information can be divided according to the context of the problem. The research problem and research focus are interrelated as reference for determining the research focus, although the focus can be changed and reduced in accordance with the data specified in the field. The focus of this research is the implementation of the Quality Management System ISO 9001: 2008 at PTPG, implementation of the Baldrige at PTPG, and integration of Quality Management System ISO 9001: 2008 and Baldrige at PTPG.

3.4. Data sources

The main data sources are recorded through written records or recording audio/video tapes, photographs or films. Amirin (2000: 132) argues that "according to the degree of the source, the data consists of two, that is the primary data and secondary data".

1. Primary Data

Primary Data i.e. data obtained from primary sources, is the original source that contains the information or data (Amirin, 2000: 132). Primary data in this study sourced from interviews with the related partners at PTPG. In addition, the primary data also sourced from the observations (site visit) to the data obtained by interview.

2. Secondary Data

Secondary Data is data that is obtained from sources that are not native to the information or data load (Amirin, 2000: 132). Secondary data is in the form of regulations, reports of the annual performance of the company, and competitors data. In addition, secondary data was also obtained from a variety of books and literatures as well as from various sources on the internet.

3.5. Data collection Techniques

Marshal and Rossman in Sugiyono (2006: 260), stated that "*the fundamental methods relied on by qualitative researchers for gathering information are participation in the setting, direct observation, in-depth interviewing, and document review*". The data collection techniques that the researcher uses in this research are as follows:

1. Library Research

Library research leads to the data collection which is done by studying literatures, corporate documents and scientific books, relating to the object of research

2. Field Research

The data resources which are being collected are as follows:

a. Interview

The interview was conducted with the considered parties in the implementation activities, related to the work process of the corporations such as managers, heads of sections and some staff at PT Petrokimia Gresik. The Data to be obtained through interviews is data about an overview or a company profile, completeness of documents useful to achieve the company's excellent performance, and PT Petrokimia Gresik's position in the competitive world of business.

b. Observation

Sutrisno Hadi in Sugiyono (2006: 162), stated that the observation is a complex process, a process which is composed of various biological and psychological processes. Two of the most important processes are the process of observation and memory. This observation was carried out with the review directly to the company and the location of the activities to obtain data or information which is required such as completeness of corporate documents.

3.6. Data Processing Techniques

The primary and secondary data that have been collected are not directly analyzed, yet they were first checked to test whether the data had flaws and mistakes. After going through this process, the data was then edited in its entirety so that the resulting data is complete and perfect, clear and easily readable and consistent. This process is called editing, which means the step to recheck the data that has been retrieved in field, whether it was obtained through interview or document review. This step is performed to improve the validity of the data that will be processed and analyzed.

3.7. Data Analysis Techniques

Data analysis techniques were conducted through the reduction of data, data presentation, and the conclusions withdrawal as opinion of Miles and Huberman in Djam'an (2009: 221), as follows:

1. Reduction of data, i.e. the selection process, clarification, abstraction or the transparency of the data that is obtained in the field either through observation or interviews with key informants. Data reduction is the form of analysis of the sharp, classified, direct, disposed, and organized the data. So that, the conclusions can be drawn and verified.
2. Presentation of data is a collection of information and data that gives the possibility of drawing conclusions and taking action. The presentation can be in the form of descriptions, graphics, and charts

Withdrawal of conclusions (verification) is the final analysis that is obtained based on the data reduction and data presentation.

IV. RESULTS AND DISCUSSION

4.1. The Company's Description

PT Petrokimia Gresik is the most complete and biggest fertilizer producer in Indonesia. The existence of this company which occupies area of land totally 450 hectares at Gresik can not be separated from the characteristics of Indonesia as an agrarian country.

PT Petrokimia Gresik started its operation by becoming the Nitrogen based fertilizer company. Yet, during its years of development and innovation, the company has developed

its capabilities to produce Phosphate based fertilizers. Up until 2012, it has 21 plants consisting of 16 fertilizer plants and 5 non fertilizer plants. The 21 fertilizer plants produce fertilizers of Phonska, ZA, SP36, Urea, and Petroganik totally 4,330,000 tons per year, whereas the 5 non fertilizer plants produce Phosphoric Acid, Sulfuric Acid, Ammonia, Cement Retarder, and Aluminum Fluoride totally 1,647,600 tons per year. With its 5,977,600 tons fertilizer and non fertilizer product capacity per year, the company strengthens its position as the leading fertilizer company in Indonesia. To meet the assignment of the Government in order to support the food self sufficiency, PT Petrokimia Gresik continuously develops new projects such as PT Petro Jordan Abadi – a joint venture company between PT Petrokimia Gresik and Jordan Phosphate Mining Company, Ammonia-Urea II, Phonska V which are hoped to finish their construction in 2015.

To support the smooth operation, the company employs about 3,300 personnel having technical and non technical education backgrounds. The capability and capacity of the employees are periodically reviewed to meet the ever changing business environment. Competency based training programs and leadership training programs are regularly conducted to improve the employees' competencies both in technical and leadership as well as managerial aspects.

4.2. The Implementation of ISO

PT Petrokimia Gresik has implemented ISO since 1996 to manage the processes in a better manner in its efforts to meet the satisfaction of the customers by providing quality products and services suited the predetermined requirements by the customers, and continuously improve the systems and processes. From the interview and document review, the researcher obtained information of the chronology of ISO certifications being registered by the company since 1996 up to 2012. PT Petrokimia Gresik considers the certification as real proof of its credibility and commitment towards the quality which is the aspect being paid much attention and considered important by the customers. The company hopes by obtaining the ISO certificate, there will be less quality audit by the customers. The ISO implementation and certification was continuously maintained up to the year of 2000. During 2000, there was an ISO migration from ISO 9001:1994 to ISO 9001:2000.

The company is completely aware of the importance of ISO to control processes being used by the company to produce products and services as required and expected by the customers. When in 2008 ISO again migrated into ISO 9001:2008, PT Petrokimia Gresik registered for certification of ISO 9001:2008. Since 2008 up until now, the company has used ISO 9001:2008 and held ISO certificate being issued by the competent and authorized institution.

The fact that PT Petrokimia Gresik has successfully implemented the management system ISO 9001:2008 is proven by the result of the internal and external audits which are small in number of audit findings to indicate the uncomformity toward the quality requirements as stipulated in the ISO Clauses.

4.3 The Implementation of Baldrige

Baldrige was first introduced in 1999 during the company ran the program of Business Transformation Program. This program was aimed at totally change the strategic values of the company. The company's vision, mission and values were examined and determined the new ones. The company also made strategic initiatives for the next ten years. During this event, the consultant introduced the use of Baldrige criteria as the management system and tool for measuring the corporate performance.

In 2004, the Indonesian Quality Award (IQA) was launced for the first time in Indonesia. This award was meant to appreciate the State-Owned Enterprices (SOEs) which

have good to excellent performance being measured using the Baldrige criteria. 12 (twelve) SOEs attended the award including PT Petrokimia Gresik, the first and pioneering fertilizer company in Indonesia joining this event which is then followed by other fertilizer companies in the coming years up until today. The implementation of each Baldrige category are as follows.

Category 1 Leadership

The senior leader has been able to deploy the corporate values systematically into the operational policy and control the result through the achievement of the Key Performance Indicators, the senior leaders has also implemented their commitment in the policy and direction as well as become the role model in the policy implementation. Besides, in terms of law and regulation, the senior leaders of PTPG has shown their commitment to create the organizational environment being needed to foster the internal rule governing the execution of the law and regulation by all organizational members. The senior leaders have implemented the two way communication system. Through this communication forum, the senior leaders communicate the important decisions to be understood by all employees. Further, for the sub category of Governance and Societal Responsibilities, PTPG has committed to implement Good corporate governance. The review of the management responsibilities are conducted through the General Meetings of Shareholders for performance and annual budget, as well as the review upon the fiscal accountability and tax payment to meet the valid rule and regulation, create the transparent operations by presenting annual reports and management reports. The senior leaders also conducted fair and transparent selection for external auditors to audit the corporate operations, and disclosure of all policies of the governing boards by providing information and easy access for stakeholders.

It has been found the opportunity for improvement in this Category 1 Leadership, that is, there should be determined the performance indicators for improving the implementation of corporate values and code of business conduct which have been used as guidance for the employees in conducting transactions and interactions with the corporate stakeholders. The other indicator which should be determined is for the effectiveness of the corporate communication with its stakeholders.

Category 2 Strategic Planning

PTPG is able to develop its strategic planning by involving all senior leaders. In developing the strategic planning, the company uses SWOT analysis to identify the strategic challenges and strategic advantages. The company collects other data and information such as initial indications of technology changes, markets, products, and customer needs.

The corporate strategic planning is regularly evaluated to be suited with the changing demands of the corporate business. In developing the action plan, PTPG has implemented systematic mechanism that is the long term corporate planning has been equipped with strategic objectives, strategies, and policies. The results of action plan implementation are periodically evaluated including the evaluation of the performances of the suppliers and partners for improvements. The long term strategic planning of the company also covers the human resource strategic planning.

In this Category 2, there is an opportunity to improve that is the company does not report the comparison of its strategic objectives with the projection of the competitors' performances.

Category 3 Customer Focus

In listening to the voices of the existing and potential customers, PTGPG tries to obtain the information concerning with the satisfaction and dissatisfaction of the customers on the company products and services. The instruments being used to listen to the customers' voices are survey, polling, and customers gathering. The customers' voices are very important for the company for its business development. The customer's voice may help the company to provide products to meet their needs, so that the products being produced by the company achieve the targets of quantity and quality. The company is requested not only to listen to its own customers but also to the competitors' customers. This is meant to make the company be able to know its competitive position relative to the competitors. To engage the customers, the company after listening to the voice of customers then identify the needs of customers and markets on the products and services provided by the company. Through this customers' voices, the company innovates the products so as to meet their needs. To build the relationship with customers, PTGPG provides easy mechanism for them to obtain information about the products through sms, free of charge telephone call, website and email as well as customer gatherings. PTGPG segments the customers using various information from customers, markets, and products.

PTGPG uses various mechanisms to market, build and manage the relationship with its customers to retain existing customers, obtain new customers, and gain marketshare, improve the customer engagement as well as retain the relationship with suppliers and partners.

In this Category, there is an opportunity for improvement that is the company does not determine the performance indicators to maintain the customers, fulfil the customer requirements, and exceed the customer expectations. This will impact the efforts of the company to succeed in managing the relationships. With customers.

Category 4 Measurement, Analysis and Knowledge Management

PTGPG uses the data and information to compose the Annual Budget Plan and Key Performance Indicators (KPI). The KPI covers five aspects that is product & process; customer' satisfaction; workforce; leadership, governance & CRS; and finance & market. Besides, the company also compares its performances with those of competitor using the main data being searched and collected from Holding members – the Fertilizer Producers Association, and through printed media such as Fertecon magazine, an international magazine containing information of raw material costs, as well as benchmarking.

The data and information are collected by each working unit which are then used as the basis for making business decisions and innovations, as well as to analyze and evaluate the company's performances and the impacts of the decisions upon the company's business.

PTGPG ensures that the hardware and software which are used are reliable, secure, and user friendly. The effort that the company has to ensure those conditions to establish the Information Technology Department of which responsibilities are managing the hardwares and softwares, installing firewalls, antiviruses and providing access code for the users of the company's IT for the purpose of keeping the confidentiality and security of data and information. This is important and needed by the company because the reliability of the information system becomes important parts in managing and controlling business. Besides, this reliability also helps learning development for both the company and its employees.

So far, this IT system has been able to use to collect, analyze, and present data and information from and to employees, customers, suppliers and partners to support the development of the strategic planning of the company. In this category, there is an opportunity for improvement that is the improvement of simulation to test the readiness of the company to face the emergency in the field of IT disaster.

Category 5 Workforce Focus

In creating good and healthy working environment, PTPG conducts assessment of the employees' capabilities and capacities. This is done in order that every position within the company is posted by competent employee to accomplish the works of the organization or gives their contributions optimally. PTPG has also been successful to create the working environment which improves the health, safety, and the Unit of Safety, Health and Environment which is responsible to monitor and maintain the employees' health as well as their families through the promotion, prevention and rehabilitation programs. As it is known that the level of good health, safety, and security will foster the productivity of employees and further it will improve the company's performances.

Besides healthy working environment which should be provided by the company, it also builds the strong employee engagement. The steps being taken by PTPG in building the employee engagement is by determining the main elements of engagement and satisfaction through discussion, literature study, and validity tests. The employee engagement is also influenced by the organizational culture. The organizational culture of PTPG is characterized by open communication, high performance work, and engagement through discussion forum, face to face meetings, innovation circle activities, and others. By this face to face meeting, the company hopes to gain various creative and innovative ideas for the future improvement. The employee engagement is measured through employee engagement and satisfaction survey. This engagement and satisfaction have to be sought by the company, because the employee satisfaction and engagement highly depend on their performances. The more employees are engaged and satisfied to the company where they work for, the higher the employee spirit to work. This will give positive impact on the company because the company finds it easier to achieve its performance targets.

The company also provides technical, managerial and leadership training programs for all employees and provide mechanism for leadership succession. The employees are fostered to continuously have self development through formal and non formal processes. These efforts are meant to increase the engagement and satisfaction of the employees so that they strongly use their maximum potentials to support the company to achieve its targets being previously determined within its short and long term strategic plans.

In this category 5, there is an opportunity for improvement that is PTPG needs to think of the ways to ensure that organization could gain organisasi memperoleh manfaat the benefits of various ideas, cultures, and thinking of the employees that are beneficial for the company. PTPG also needs to identify the engagement and satisfaction problems of the employees more specific so that the efforts to increase the employee capabilities and capacities can be achieved optimally.

Category 6 Operation Focus

PTPG has designed and innovated all the work systems being conducted by each working unit based on the analysis of the business development and the company's capability, the alignment with the core competencies, the needs of customers, and the stakeholders' feedbacks. In determining the requirements of the work systems, PTPG considers the strengthening of the core competencies, and the other requirements that should be achieved. The work systems of the company are supported by four key processes that is marketing, procurement, production, and sales and distribution. PTPG continuously manages and improves its work systems so as to give added value to its customers by implementing QMS ISO 9001, EMS ISO 14001, Occupational Health and Safety Management System, Halal (rightful) Management System, and Risk Management System. The implementation of these systems also make the company be able to prevent the product defects, rework, and

process errors, as well as minimize the costs of warranty, inspection, tests, audits of processes and performances.

The work process is designed using the approach of Supply-Input-Process-Output-Customer (SIPOC). The requirements of the work process are determined by considering the involvement of the workforce, customer value, and other stakeholders, as well as the rules as stated in the ISO 9001, 14001, and Occupational Safety and Health System. The company ensures the daily operations meet the requirements of the work process, quality plans, operation planning and control, recording and tests, calibration and inspection.

To ensure the continuity of the production processes, the company implements supply change management and classifies the suppliers into four groups: suppliers of raw materials, suppliers of auxiliary materials, suppliers of consultation services, and suppliers of outsourced workforce. The performances of the suppliers become the main Kinerja pemasok consideration and to be evaluated regularly. To ensure the quality of the work process implementation, the company uses the feedbacks from the customers, implementation of TQM, pendekatan PDCA approach, and the usage of the other national and international systems as the tools to improve the work processes.

In this category 6, there is an opportunity for improvement that is the reliability of the control system and information system related with the handling of the emergency conditions which are not well tested to face the disasters of the information technology and production processes.

Category 7 Results

The Category 7 Results requires the company to report the performance achievements in five perspectives: product and process; customer satisfaction; workforce; leadership; governance & CSR, and finance; and market. For the product and process aspects, PTPG reported three outcomes that is product and process as required by customers, customer needs, and effectiveness of the company operations. For the aspect of customer satisfaction, it reported the customer satisfaction and engagement, whereas for kepuasan pelanggan dan keterikatan pelanggan, sedangkan untuk aspek the aspect of workforce, it reported the workforce capabilities and capacities, workforce climate, and workforce development. For the aspect of leadership, governance and CSR, it reported the outcomes of leadership, governance, law and regulation, as well as the ethical behavior; and for the aspect of finance and market the company reported the outcomes of financial indicators such as ROI, ROE, and ROA; and the outcomes of market such as the volume and value of sales of products and services, and the development of new markets, and so on.

In general, it can be said that the performance of the company being reported in this category showed good level meaning that the achievement of the existing performances are higher than those of the previous year. The performance trends reported are beneficial. In this category 7, there is an opportunity for improvement that is the lack of comparisons of the competitors' performance for each outcome being reported. This has actually been stated in the organization profile that it is not easy for the company to find suitable comparative data.

4.4. The Integration Of ISO and Baldrige

From the results of the interview and document review, the researcher found out that PT Petrokimia Gresik has successfully implemented the Quality Management System ISO 9001:2008 and *Malcolm Baldrige Criteria for Performance Excellence* (MBCfPE) or Baldrige criteria. Since 1996, ISO has been used to manage the processes to ensure the products and services meeting the requirements being determined by customers so that the

company is able to fulfill the customers' satisfactions. Also, the certificate of ISO which has been obtained by the company since 1996 could be maintained up until today.

The company has also been successful to implement the Baldrige criteria since 2005. The Baldrige criteria has been used by the company to manage and innovate the work systems and work processes so that company is able to provide ever-improving value to customers, and improve the overall performance of the company. The proven success of its implementation is that PT Petrokimia Gresik has continuously gained the increasing scores of Baldrige during its joining the Indonesian Quality Award (IQA) every year being held by the Indonesian Quality Award Foundation (IQAF) – an event for assessing the State-Owned Enterprises (SOE) performances using the Baldrige criteria started from 2004 to 2012.

Based on the interview and document study, the researcher also found out the fact that the success of the company in implementing the two systems has not been supported by the efforts of integrating the two systems in a formal approach. Yet, ISO implicitly supports the implementation of the Baldrige criteria at PT Petrokimia Gresik, especially the Clauses 4 to 8 which support the implementation of the Category 6 : Operation Focus of the Baldrige criteria. The researcher tries to depict the integration of ISO and Baldrige which is implicitly used by PT Petokimia Gresik to manage the implementation of the Baldrige criteria so that the company may achieve its excellent performance, as seen in the Table below.

The Integration of ISO and the Baldrige criteria (Category 6 : Operation Focus)

ISO (Clauses 4 s/d 8)	Category 6 : Operation Focus
Clause 4.0 Quality Management System	6.1 Work Processes
<ul style="list-style-type: none"> • Identifying the processes being needed by the quality management system and its application for all organizations. • Determining the sequences and the process interaction. • (7.0 Product Realization) The organization has identified the requirements related with the products. • The organization has planned and controlled the design and development of the products. 	<ul style="list-style-type: none"> • Design Concepts. Company design their products and processes to meet all key requirements. The company incorporate new technology, organizational knowledge, product excellence, and the potential need for agility into the product and processes. • Support Process The company determine their key support processes. The company explain their key support processes. The company ensure their day to day operation of these processes to meet their key business support requirements.
<ul style="list-style-type: none"> • Identifying the processes being needed by the quality management system and its application for all organizations. • Determining the criteria and methods needed to guarantee the effectiveness of the operational and process control. • (7.0 Product Realization) The organization has identified the requirements related with the products. 	<ul style="list-style-type: none"> • Product and Process Requirements. The company determine key product requirements. The company determine key work process requirements. The company the company determine key work processes. The company determine the key requirements for these work processes.

<ul style="list-style-type: none"> • The organization has planned and controlled the design and development of the products. 	
<ul style="list-style-type: none"> • Determining the criteria and methods needed to guarantee the effectiveness of the operational and process control. • Ensuring the availability of resources and information needed to support the operations and control the processes • Measuring, controlling, and analyzing the processes • (5.0 Management Responsibility) Top Management starts or proposes actions or measures and indicators and communicates them to all organizations regarding the importance of meeting the customers' needs. • Top management reviews the requirements of resources or has owned measures and indicators, and at the same time provides the resources to achieve the quality objectives. 	<ul style="list-style-type: none"> • Process Implementation. The company has to ensure day to day operation of work process meet their key requirements. The company use key performance measure or indicators and in-process measure to control and improve their work processes. The measure related to end product quality and performance.
<ul style="list-style-type: none"> • Measuring, controlling, and analyzing the processes. • Implementing actions needed to achieve the planned results and continuous improvement of the processes • Determining the sequences and the process interaction • Determining needed actions to achieve planned results and continuous improvements of the processes 	<ul style="list-style-type: none"> • Product and Process Improvement. The company improve their work processes to improve products and performance and reduce variability. • Cost Control Control the overall costs of the company's operations. Incorporate cycle time, productivity, and other efficiency and effectiveness factors into the work processes. Preventing defects, service errors, and rework and minimize warranty costs or customers productivity losses, as appropriate. Minimizing the costs of inspections, tests, and process or performance audits as appropriate. Balance the need for cost control with needs of the customers.
<ul style="list-style-type: none"> • The organization evaluates and chooses the suppliers based on their capabilities to offer products related with the 	<ul style="list-style-type: none"> • Supply-Chain Management Managed the supply chain. Selects supplier and ensure that they are

<p>organization's requirements.</p> <ul style="list-style-type: none"> • The organization defines the criteria for periodically choosing and evaluating the suppliers. • The evaluation results upon the performances of the suppliers are recorded and documented well. • (8.0 Measurement, Analysis & Improvement) The organization uses measures to collect and analyze reliable data to ensure the conformity and effectiveness of the quality management system and identify actionable improvements. The data covers: satisfaction and dissatisfaction of customers, conformity towards the customers' needs, characteristics of products, processes, and trend; and suppliers 	<p>qualified and positioned to enhance the performance and customers' satisfaction. Measure and evaluate the supplier performance. Provide feedback to the supplier to help them improve. Deal with poorly performing suppliers.</p>
<p>Is not covered in ISO.</p>	<ul style="list-style-type: none"> • Safety Provide a safe operating environment. Safety system address accident prevention, inspection, root-cause analysis of failure, and recovery. • Emergency Preparedness Ensure that the organization is prepared for disasters or emergencies. The disaster and emergency preparedness system consider prevention, continuity of operations and recovery.
	<ul style="list-style-type: none"> • Innovation Management. Manage innovation. Pursue the strategic opportunities that determined are intelligent risks. Make the financial and other resources available to pursue these opportunities. Discontinue pursuing opportunities at the appropriate time to enhance support for higher-priority opportunities.

4.5. The Benefit of ISO and Baldrige Integration

Based on the results of interview and document review, the researcher found out the benefits of integrating ISO and Baldrige as follows:

1. The integration of the two systems has created synergy resulting in increased efficiencies in managing the systems and eliminates duplication of work, especially during audits. These efficiencies may cover audit costs and audit times.
2. The integration of the two systems has created synergy resulting in increased effectiveness in improving the performance of quality, eliminating the conflicting responsibilities, increasing consistency and improved communication, and increasing the use of organizational wide assessment.
3. The integration of the two systems improves the coordinated efforts for measuring and monitoring of strategic and operational improvements in a huge benefit of good integration.
4. The integration of the two systems promotes linking the two different professional groups (Baldrige professionals and ISO professionals) within the company with the same fundamental aims of on going improvement and driving best practices.
5. The integration of the two systems helps the employees or the company use integrated database covering all of the disciplines. This means that document control, internal audits, corrective actions, and preventive actions can be recorded and tracked on a central system to ensure clear communication and coordination of efforts.
6. The integration of the two systems, possibly integrating other systems such as environmental management system, safety and health management system, risk management system, drives the company and employees use Baldrige as the umbrella of these integrated management systems for the coordination, monitoring, measurement, and implementation of continuous improvement at a more strategic level.
7. The integration of the two systems makes quality not to be limited to continual improvement at the operational level only, but it is also used at the strategic level.
8. The integration of the two systems may put the corrective actions, preventive actions and audit findings as the Opportunity For Improvement (OFI) and allow a better alignment of strategic, tactical, and operational initiatives.
9. The integration of the two system moves the focus of ISO from compliance of individual components to improving key performance indicators corporate-wide.
10. The integration of the two systems has ISO becomes stronger in its role to help the company address and impact sub categories of Baldrige. This means that ISO plays important role in increasing the effectiveness of Baldrige implementation and achieve high score of Baldrige.

V. CONCLUSION AND SUGGESTION

5.1 Conclusion

1. The implementation of ISO at PT Petrokimia Gresik has been conducted since 1996 effectively to manage the processes to produce the quality products and services provided by the company to fulfill the customers' needs and expectations as well as meeting their satisfactions. The company also registered for ISO certifications starting from 1996 up to 2012. The success of this ISO implementation has resulted in the *stakeholders'* trust that the company runs its processes to produce quality products and services in line with the international standard, as well as the positive impacts for the smoothness of the implementation of other management systems within the company.
2. The implementation of Baldrige at PT Petrokimia Gresik was started by the introduction of this management system during the strategic program called *Business Transformation Program* conducted by the company in 1999. Formally, the company has implemented this system since 2005 in which the company started to attend the

Indonesian Quality Award (IQA) being held by the *Indonesian Quality Award Foundation (IQAF)*. The company gains good reputation and trust from its stakeholders that the business of the company has been managed using the world-class criteria for performance excellence. The success of this system implementation is indicated by the achievement of increasing scores of IQA since 2005 to 2012. In 2012 the company entered Band V – Emerging Industry Leader.

3. PT Petrokimia Gresik uses informal approach in integrating ISO and Baldrige. No formal document is found as evidence of the integration of the two systems. The success of Baldrige implementation is indicated by the increasing scores achievement of IQ from 2005 to 2012. The company achieved Band V – Emerging Industry Leader in 2012. This successful achievement is considered being the proof of the alignment and integration of ISO and Baldrige, especially the alignment and integration of ISO Clauses 4 to 8 with the Sixth Category of Baldrige that is Operation Focus.

5.2 Suggestion

1. The company should take a formal approach of integrating ISO and Baldrige by producing a controlled document containing the detailed integration of ISO clauses and Baldrige item criteria. This document plays important role as a source of improvement and scholar's studies.
2. This research may be considered as the initial step to further study the integration of ISO and Baldrige which might be useful for the other researchers to conduct deeper study on subject at PT Petrokimia Gresik or any other company implementing ISO and Baldrige.

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