

# The Role of Leadership on Sustainable Improvement in Improving Product Quality in the Division of PT. North Sumatra Coal Inalum

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## ABSTRACT

Leaders in organizations, including company managers who aim to increase production and efficiency to maximize results for the organization they lead. A leader must bring the organization or company and all its employees with a clear vision. With a clear vision, concepts and organizational goals can be adequately described. Still, leaders must also mobilize all resources within the company to move together and work together to achieve goals effectively. Leaders must have a clear vision in building and developing a business, especially product quality improvement. A clear vision and mission of the company and implemented together is the key to the company's success to compete in the business world, such as PT. Inalum Coal North Sumatra produces quality products and can compete in the world. The objectives of this study are 1) to determine the role of leadership in continuous improvement and its implications for the quality of the product division of PT. North Sumatra Coal Inalum; 2) to determine the factors that affect the progress of product quality in the Division of PT. North Sumatra Coal Inalum. This research is a case study that was analyzed with a qualitative approach. This research shows that leadership is vast in making continuous improvements to produce quality products that can compete in the business world on a national and international scale.

**Keywords** – Leadership; Continuous Improvement; Quality; Product

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## INTRODUCTION

Competition in the business world in the face of free trade, then every company must be able to face increasingly fierce and fierce competition. Companies must compete on a national and international scale, so companies are required to improve the quality of products produced by company performance. The company always makes efforts to develop the quality of its products, hence the importance of resource availability, technology transfer management, operational management, and total quality management,

which is also known as Total Quality Management (TQM). Besterfield (2003) revealed that in today's era of global market competition, consumer demands for improving the quality of products and services are getting higher. There has also been an increase in the supply of products and services at more competitive prices from countries with low labour costs, such as countries in the eastern region; China, Vietnam and India (1).

Every leader must be faced with the challenge of managing a company in a business world full of intense competition. This is one of the leadership roles that are indispensable in a company to make changes in the organization (company) that aims to produce better product quality. Leadership can encourage increased creativity in delivering quality products. Still, this effort must also be supported by every superior company resource and can compete in the business world.

Continuous improvement efforts in every field must exist in the company that implements TQM to involve all components in the company. The leadership of PT does the same. Inalum Coal North Sumatra strives to compete in the business world, both nationally and internationally. PT made continuous improvements. Inalum Batubara North Sumatra concerns all company components, namely its human resources, through a well-organized management process. This constant improvement is intended to improve the quality of the products produced by PT. North Sumatra Coal Inalum.

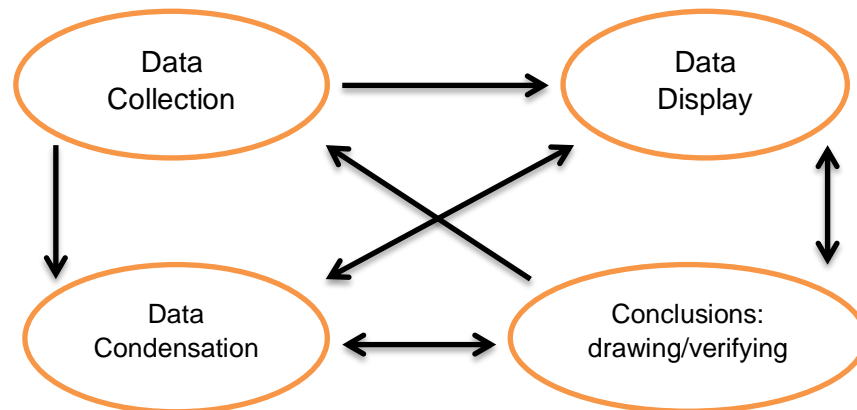
Continuous improvement is expected to improve product quality, so this is where the critical role of company leaders is to be able to organize their resources properly. The role played by the company's leadership also requires a productive workforce to help select quality goods and unqualified goods. Besterfield (2003) states that effective human resource management is by directing employees in a productive direction, where behaviours that lead to increased productivity include: 1) Intelligent and can learn relatively quickly; 2) Competent professionally; 3) Creative and innovative; 4) Understanding the job; 5) Learn to use logic and not quickly get stuck in work cleverly; 6) Always looking for improvements, but knows when to stop; 7) Considered valuable by his superiors; 8) Have a good record of achievement; 9) Always improve yourself (1).

The application of TQM carried out by company leaders is an effort to improve product quality influenced by resources. Companies that have a high level of work products such as PT. Inalum Batubara North Sumatra means that it will also carry out the production process at a high level. This TQM can also streamline the role of leadership towards continuous improvement in improving product quality.

## **METHOD**

The research method used is a qualitative method, which is a type of research that seeks to describe the object or subject under study by what it is to systematically describe the facts and characteristics of the thing under study correctly and understand each context of the phenomenon as a whole. Creswell (2014), that qualitative methods by several individuals and groups of people are methods to explore and understand the meaning of social or humanitarian problems (2).

Miles and Huberman (2007) explained that qualitative data analysis activities can be carried out in an interactive model and can take place continuously until complete so that the data is saturated (3). Furthermore, Miles, Huberman and Saldana (2014) explain that there are three activities in interactive model data analysis, namely data condensation, data presentation (data display) and conclusions/verification (drawing/verifying), which must be carried out continuously and repeatedly. Repeated by the researcher, as shown in the image below:



**Gambar 1.** Interactive Model Data Analysis (Interactive Models)  
source: Miles, Huberman and Saldana (2014) (3).

The stages in the qualitative data analysis of this interactive model are as shown in Figure 1.

Data collection, this stage includes all data analysis activities, namely interviews, documentation studies, and observations.

Data condensation refers to the process of selecting, simplifying or changing data that emerges from written field notes, interview transcripts, documents and other empirical materials that are carried out in a focused manner. Data condensation makes data stronger, starting with abstracting, coding, searching for themes, making clusters, and aims to eliminate irrelevant data or information that is also not by the research focus that has been formulated. This condensation process is carried out by collecting data (primary data and secondary data) obtained in the form of interviews, FGD results, observations and documents. The data is collected, then verified and then sorted to understand the meaning of each data. The data that is inappropriate and irrelevant to the research focus must be set aside.

Data display is the stage of drawing conclusions and taking action through descriptions of structured data and information. The presentation in this stage is presented in the form of narrative text and also in the form of matrices, diagrams, tables and charts based on the sub-focus of the research that has been formulated. The data presented are

sourced from interviews, directed documents and other documents, and presenting data in the form of quantitative tables and pictures of observations in the field.

Conclusion/verification: This data analysis's last activity makes conclusions/verification. Drawing conclusions in the form of interpretation activities, namely the discovery of meaning in the data that has been presented. Between displaying data and drawing conclusions, data analysis activities are repeated continuously. This process can be a picture of success in sequence as a series of interrelated analysis activities. The data has been analyzed, explained, and interpreted in words to describe facts. In the field, so that research questions are answered to achieve the research objectives.

## **RESULTS AND DISCUSSION**

### **Efforts Made by the Parigi Moutong Resort Police in Combating the Crime of Fish Bombing**

PT. Inalum Batubara Utara Sumatra is the company that builds and operates the Asahan Project by the master agreement. The share ratio between the Indonesian Government and Nippon Asahan Aluminum Co., Ltd, when the company was founded was 10% to 90%. In October 1978, the ratio became 25% with 75%, and since June 1987, it was 41.13% with 58.87%. And since February 10, 1998, to 41.12% with 58.88%. To implement the provisions in the master agreement, the Government of Indonesia then issued a Presidential Decree No.5/1976, which underlies the formation of the Asahan Project Development Authority as the representative of the Government who is responsible for the smooth development and development of the Asahan Project. Inalum is a pioneer and the first company in Indonesia engaged in the aluminium smelting industry with 411 billion Yen.

De facto, the change in Inalum's status from PMA to BUMN occurred on November 1, 2013, by the agreement contained in the Master Agreement. Termination of the contract between the Government of Indonesia and the Japanese Consortium of Companies took place on December 9, 2013. De jure Inalum officially became a BUMN on December 19, 2013, after the Government of Indonesia took over the shares owned by the consortium. PT INALUM (Persero) officially became the 141st BUMN on April 21, 2014. The Republic of Indonesia made additional capital participation into the share capital of the Company (Persero) PT Indonesia Asahan Aluminum, whose status as a Limited Liability Company (Persero) was determined based on Government Regulation No. 26 of 2014 concerning the stipulation of PT Indonesia Asahan Aluminum as a Limited Liability Company (Persero) of PT Indonesia Asahan Aluminum. Government Regulation of the Republic of Indonesia Number 76 of 2016 concerning Addition of State Equity Participation of the Republic of Indonesia into the Share Capital of the Company (Persero) PT. Indonesia Asahan Aluminum. PT. INALUM (Persero) is located in 4 (four) different locations, namely: 1) Smelting Factory Head Office, Kuala Tanjung; 2) Hydropower Office, Paritohan; 3) Liaison Office, Jakarta; 4) Liaison Office, Medan.

PT. Inalum Batubara North Sumatra is the only aluminium smelting plant in Indonesia operating for three decades. PT INALUM (Persero) should be socially considering participating in improving the economic and social welfare of the community around the company because the company realizes that the smooth running development and successful operation cannot be separated from all stakeholders. The company's success and the surrounding community's independence are expected to be created and grow together. Based on this, PT. Inalum Batubara needs to continue to develop its business in maintaining continuity and improving its company, whether or not a company develops on the involvement of various parties, both leaders, employees, customers. This must be done synergistically, by the opinion of Rivai and Sagala (2009), which says that the essence of the quality movement lies in the continuous search for information to improve its products, services and processes. TQ can direct themselves to quality behaviour and can be enhanced by learning and improving the quality of knowledge (4).

Global competition in the business world at this time, companies are required to use a good management system where this management system can be used as a tool to improve company performance through the performance of its leaders and workforce. Strong competition among fellow companies, demands a maximum leadership role in organizing companies with integrated management (TQM) by making continuous improvements so as to produce quality products.

TQM is a way to improve performance related to quality continuously. TQM is an effort to compete that excels in the global competition in the business world by producing the best quality and quality. Tjiptono and Diana (2003) explain that TQM is an approach in running a business to try to maximize organizational competitiveness through continuous improvement of products, services, processes and the environment (5). Then, Nasution (2005) explains that TQM is a combination of all management functions, all parts of the company and everyone into a holistic philosophy that is built on the concepts of quality, teamwork, productivity and customer satisfaction (6). There are 10 (ten) characteristics of TQM developed by Goetsch and Davis (Nasution, 2005), namely: 1) Focus on the customer. A customer is a person who must be served, where attention is focused on the needs and expectations of customers. Every organization that implements TQM must know, identify and analyze the needs and expectations of its customers to satisfy them. Where the product/service that is made or provided must be by the customer's wishes. 2) Obsession with quality. In organizations that implement TQM, the primary obsession of a company is to improve the quality of both products/service quality, workforce, processes, and work environment, where quality is an essential factor in improving company and employee performance and attracting consumers/customers. 3) Scientific approach. This approach is indispensable in applying TQM, especially for designing work, decision-making, and problem-solving related to the planned job. Thus, data is needed to set benchmarks, monitor performance, and implement improvements. 4) Long term commitment. TQM is a new paradigm in doing business. For that, we need a unique corporate culture as well. Therefore, long-term commitment is significant to make a cultural change so that the

implementation of TQM can run successfully. 5) Teamwork (teamwork). In traditionally managed organisations, competition is often created between departments in the organization so that their competitiveness is boosted. Meanwhile, in organizations that implement TQM, teamwork, partnerships, and relationships are established and fostered among company employees and suppliers, government institutions, and the surrounding community. 6) Continuous improvement of the system. Every product and service is produced by utilizing specific processes in a system/environment. Therefore, the existing system needs to be improved continuously to increase the quality it has. 7) Education and training. Today, companies still turn a blind eye to the importance of employee education and training. Such conditions cause the company concerned not to develop, and it is difficult to compete with other companies, especially in global competition. Meanwhile, education and training are fundamental factors in organisations that implement TQM. 8) Controlled freedom. 9) Unity of purpose. 10) Employee involvement and empowerment (6).

Leadership is one of the critical elements to achieve the company's successful performance towards continuous improvement to produce quality products. PT. Inalum Batubara North Sumatra has demonstrated the company's success by delivering quality products through continuous improvement guided by a vision that defines the background, objectives and parameters of TQM. The leadership role greatly influences the achievement of product quality and determines the development of the company's performance. This is by the company's objectives that must be achieved by the company's components, namely maintaining the company's survival, progress and welfare of employees and owners. Fatah (2013) leadership in English is referred to as leadership which means being a leader power of leading: the qualities of a leader (7). Furthermore, Robbins (2003), leadership is the ability to influence a group towards the achievement of goals (8). Thabrani (2013) that leadership is the process of appreciating others to understand and agree on what needs to be done and how it can be implemented effectively and facilitating individual or group (collective) efforts to fulfil critical goals. So, when it comes to TQM, one of the supporting elements of TQM is leadership (9).

The leadership role at PT. Inalum Batubaru, North Sumatra, is very large because it can carry out the role of a leader, as stated by Duha (2018), namely: 1) Giving direction, that a leader is expected to be able to provide advice so that it can be known to what extent the effectiveness and efficiency of implementation in efforts to achieve goals. 2) Agent of change, a leader as a catalyst for change in the external environment. For this reason, leaders must anticipate developments in the outside world, analyze their implications for the organization, set the right vision to address the main issues and priorities for these changes, promote research, and empower employees to create essential changes. 3) Speaker, that the leader as an expert speaker, good listener, and determinant of the organization's vision is an adviser to the organization's negotiators from outside parties to obtain support information, ideas, and resources useful for organizational development. 4) Coach, that the leader is a team builder who empowers individuals in the organization and

directs their behaviour according to the vision that has been formulated. In other words, he acts as a mentor who makes the vision a reality (10).

PT. Inalum Coal Sumatra is a company that can compete in the national and international business world. This is due to good management quality and supported by reliable leaders and a productive workforce to produce quality products or services. This quality product is also expected to continuously improve the company by looking at the times and customer satisfaction both internally and externally. Tanjung (2018) explains that product quality is the standard of conformity with expectations for all human or consumer needs or desires.

Optimization in improving product quality can run well if it is supported by the ability of the resources owned by the company so that it can compete and excel in a business competition at national and international levels. Tanjung (2018) that there are dimensions of product quality: 1) Performance, which relates to the essential operating characteristics. 2) Durability, which means how long or the age of the product in question lasts before the product must be replaced. The greater the frequency of consumer use of the product, the greater the durability. 3) Conformity with specifications, namely the extent to which the essential operating characteristics of a product meet certain specifications from consumers or no defects are found in the product. 4) Features are product characteristics designed to enhance product functions or increase consumer interest. 5) Reliability is the probability that the product will work satisfactorily or not within a certain period. The less chance of damage, the more reliable the product is. 6) Aesthetics relates to how the product's appearance can be seen from the appearance, taste, smell, and shape of the product. 7) The impression of quality is often said to be the result of using indirect measurements because there is a possibility that consumers do not understand or lack information about the product in question. Thus, consumer perceptions of the product are obtained from price, brand, advertising, reputation and country of origin (11).

Feigenbaum (2000) that the factors that affect product quality, namely 1) Market; 2) Money; 3) Management; 4) Humans; 5) Motivation; 6) Materials; 7) Machinery and mechanization (12). So, these factors also have influenced the quality of the products produced by PT. North Sumatra Coal Inalum. The role of a leader in making continuous improvements must also pay attention to the factors that affect the quality of the product because it can cause negative or positive impacts in the global competition in the business world.

PT. Inalum Batubara North Sumatra makes these factors a guideline for continuous product quality improvements. Very tight competition in the business world is one of the decisive impetus for PT. Inalum Batubara North Sumatra is making steady improvements with quality management (TQM) support.

## **CONCLUSION**

The leadership role at PT. Inalum Coal North Sumatra significantly affects product quality which is carried out by continuous improvement. The role played by a leader is also

supported by productive employees and energy that can produce quality products. The leadership role is also seen from the management applied in making continuous improvements in delivering quality products and supported by the resources owned by the company, such as a productive and creative workforce. Not only this but motivation is also needed to increase the morale of the company's employees to process materials into quality products. A leader must also be able to maintain other resources, namely machines and mechanization, to continue to make continuous improvements to product quality, superior products and compete in the business world, both nationally and internationally. Continuous improvement is an element in realizing quality management in a company that aims to produce quality products. Continuous improvement or continuous improvement is associated with factors that affect product quality. For example, in producing a quality product, it must be seen from the readiness of the market to accept the product, as well as cash capital that can support continuous improvement by market needs. The importance of a quality standard in producing superior products in the industrial world can help government policies in realizing total quality management (TQM) in the economic sector. The increase in the economy is also influenced by superior products produced by industrial companies, especially companies under the auspices of State-Owned Enterprises (BUMN) such as PT. North Sumatra Coal Inalum. Recommendation for research is 1) Compilation of quality management standards in producing quality products; 2) Formulation of economic policies related to total quality management (TQM).

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