COMPLETION REPORT

Implementation of KAIZEN Philosophy and Its Effect on Product Quality Improvement to Indonesia Manufacturing Industries to Prepare ASEAN Economic Community (AEC) 2015: A Case Study on Manufacturing Companies in Semarang

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Background

Southeast Asia free trade, commonly known as Asean Economic Community (AEC), was established in 2015. Along with its easiness in the flow of goods and services, it creates both opportunities and threats for Indonesian economy. One of the most which gets high impact of this threat is domestic industries. Indonesia should be ready to compete with other countries that have sturdy industrial such as Malaysia, Singapore, Philippines, and Thailand. Close to 42,9% the national income of Indonesia comes from industrial sector therefore a great chance has widely opened for Indonesia to participate in AEC.

Semarang, the capital city in central java Indonesia has a number of manufacturing industries. Appropiate strategy is needed to face AEC competition in order to hold out their existence. Manufacturing industries in Semarang have implemented ISO Standard 9001:2008 by adopting KAIZEN concept from Japan. The name of KAIZEN derive from two words, Kai means Change and Zen means Good. There are five fundamental processes in KAIZEN 5S, i.e. Seiri (sorting); Seiton (straightening); Seiso (shine/cleanliness); Seiketsu (standardization in the workplace); and Shitsuke (sustaining self-discipline and promoting a sense of pride in workers in their work and being owners of their responsibility). Meanwhile KAIZEN also contains 3M concepts Muda (eliminating the waste); Mura (eliminating diference); Muri (eliminating tense). KAIZEN concept is continuous improvement that believed to increase corporate culture, job productivity, and product quality. This research was conducted in order to measure the performance of manufacturing industries in semarang after implementing ISO Standard 9001:2008 together with KAIZEN concept. Further more this research also observed the improvement in corporate culture, job satisfaction, organizational commitment and job productivity.

Research Method

Following are some activities that have done by the researcher:

- 1. Visiting to 51 industries, Out of 51, only 12 industries are willing to be the sample and finally got 256 respondents
- 2. Observing the circumtances of industries
- 3. Directly seeing the process of production
- 4. Interviewing to the staff and management in each industry in order to check their understanding about KAIZEN, and the implementation of KAIZEN concept.
- 5. Distributing questionnaire to the respondents containing some variables such as: Corporate Culture with 5S (seiri, seiton, seiso, seiketsu, shitsuke) and 3M (Muda, Mura, Muri), Job Satisfaction contains salary, relationship, supervisor, job satisfaction and growth, Organizational Commitment contains continuance commitment, affective commitment and normative commitment, Job Productivity contains quality, effective, efficient.

The results from interview and questionnaire were analyzed then processed by Likert scale, started from level 1 (strongly disagree) to level 5 (strongly agree). The data were also processed by SEM approach combined with Warp PLS 3.0

Research Finding

Research finding shows that manufacturing industries which adopting KAIZEN concept to face AEC 2015 got impacts as follow:

- In the early of AEC in Indonesia, manufacturing industries depressed to face in because Indonesia already passed CAFTA (China-ASEAN Free Trade Area) in 2010. Many industries can not compete with China's products and finally collapsed. Five next years later, in 2015, AEC was officially implemented in Indonesia and the impact is decreasing industries product. For industries which adopting KAZEN concept and ISO 9001:2008 continually their production getting stable.
- 2. By observing the industries circumtances which adopting KAIZEN concept have tidy places.
- 3. By observing the process of production which implementing Standard Operating Procedure based on KAIZEN create better performance in their works.
- 4. Based on the result of questionnaire, statistically, industries got high benefit after implementing KAIZEN concept. Therefore the improvement of corporate culture increased significantly. In other hand the concept also be able to encourage staff's ability, efficiency to their job, and job satisfaction. The principles and value of KAIZEN gives positive effect for staff. As a result, staff commitment, product quality, effectiveness, and job efficiency increased.

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