

Research on Continues Mediation: Employee Behavior and TQM Practice as ISO 9000 Strategy to Improve Performance of Manufacturing Company in East Java, Indonesia

Harianto Respati* Rofikul Amin

Economic and Business Faculty, University of Merdeka Malang, 62-64 Trs Ry Dieng, Malang, Indonesia

* E-mail of the corresponding author: patidarma@yahoo.com

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Abstract

The purpose of this research is to evaluate the contribution of establishing ISO 9000 towards the performance of manufacturing company, and also examine and describe the employee behavior and TQM (Total Quality Management) Implementation as continue meditation in a structural model. This research examined 248 large scale manufactures, which are still active and ISO 9001 certified. The research design is experimental quantitative by proving hypothesis. The research respondent is Representative Management of the company. The analysis is using Structural Equation Modeling to examine and expose the effect of research variables. The urgent of this research based on the significant role of the human resources, which is Employee Behavior as the company strategy to reach the affectivity of TQM. It is necessary to be investigated to answer the theoretical studies of ISO 9000 in order to improve the performance of the company. The study highlights the mediating role of employee behavior and TQM implementation as the research originality and novelty in the field of operational management referring to the purpose of applying ISO 9000, which is to improve the performance of manufacturing company. The results proved that the establishing of ISO 9000 have not been able to directly improve the performance of manufacturing company. In this research, it was found that Quality System, which is the establishment of documentation system in regulating ISO 9000, was able to give positive competence for the employees in running the quality work program (TQM practice) that in the end would improve the performance of the company.

Keywords: ISO 9000, Employee behavior, TQM practice, Manufacture performance, Indonesia.

1. Introduction

The ISO 9000 certification is well known by most industrial people for quality management system (Ilkay and Aslan,2012). ISO 9000 can be implemented in various kinds of Manufacturing Company as well as Service Company (Briscoe *et al.* 2005). Every other countries has their own version of naming ISO 9000 as the international language of quality. For instance, US Military has MIL-Q-9859, and NATO has AQAP-1 for the ISO 9000 certification (Gustafson *et al.* 2001). The main purpose of ISO 9000 certification as the standard of quality management system is user satisfaction (Brown and Wiele,1995; William, 1997; Cadesus,2001; Pan's,2003; Respati *et al.* 2013, even the ISO 9000 Guidelines from the 1987 until the 2008 versions stated that it is for the purpose of User Satisfaction. Research by Ilkay and Aslan (2012) reflected that the performing variables with three indicators such as financial, internal business, and customer satisfaction criteria. Referring to the result of Ilkay and Aslan (2012) it indicates that User Satisfaction is indeed part of Company Performance.

In reality, there are many previous studies that examined the impact of implementing ISO 9000 certification towards the User Satisfaction, while on the other hand it is very different with Ilkay and Aslan perception (2012:756) saying "Other studies found that ISO 9000 had a very limited effect of ISO 9000 on Performance". This difference became a gap to fulfill the lack of theory.

The test of ISO 9000 towards the Company Performance as done by Navech and Marcus (2005) concluded that the implementation of ISO 9000 have not stimulated the Company Performance. Wayhan *et al.*, (2002) found that ISO 9000 still did not have positive impact towards the Organizational Performance such as level of sales, capital, and net income of the company. In other research, it was found that ISO 9000 also still did not have any positive impact towards the financial performance (Tsekouras *et al.* 2002). However, experts such as Gotzamani and Tsiotras (2002) claimed that the motivation of adopting ISO 9000 was to improve the User Satisfaction, profit, and market share (Santos and Escanciao, 2002). Since the ISO 9000 was established (in 1987 which was ISO 9000:1987), there were a lot of experts saying that the adoption of ISO 9000 could improve the company performance, which was proven by the research done by Jain and Ahuja (2012) in India finding that the implementation of ISO 9000 was able to improve the manufacture performance such as top management contribution, continuous improvement, and initiative in implementing ISO 9000, but it was not yet founded a

research that could prove a direct impact of implementing ISO 9000 towards the company performance.

The relation and impact of implementing ISO 9000 towards the company performance were assessed as not giving clear, complete, and satisfying information. There are many factors to be considered for ISO 9000 in order to improve the Company Performance such as the condition of micro and macro economics, culture, human resources quality, quality motivation, and many more. For researchers, this was the chance to fulfill the gap of theory as the research urgency. This gap needs to be filled with mediating variables thus the position of implementing ISO 9000 towards the Company Performance would be informative in order to make sure what kind of approach is suitable for implementing ISO 9000 to improve the Company Performance. The goal is to give theoretical concept that is original and fundamental for studies in ISO 9000 related with performance.

The truth is that the implementation of ISO 9000 still could not stand by itself to improve the Company Performance that was clarified by Ilkay and Aslan (2012) "ISO 9000 certification alone cannot improve performance". Every company has different advantages to reach the performance. There is still no literature study explaining about the legitimacy of indicator to predict the relation and impact of ISO 9000 towards the Performance (Starke *et al.* 2012; Ilkay and Aslan, 2012).

The result of testing ISO 9000 towards Company Performance conducted by Ilkay and Aslan (2012) shown that ISO 9000 was not able to directly impact the Company Performance (SMEs) in Turkey. Ilkay and Aslan (2012:771) suggested considering other factors like Employees' Behavior, Total Quality Management (TQM), certification motivation, consulting service utilization and company strategy orientation so they would be tested in the relation of ISO 9000 towards the Company Performance for future research. Ilkay and Aslan (2012) suggested that they would inspire the researchers to set Employees' Behavior and TQM Practice as original mediator for ISO 9000 to improve the Company Performance.

In a literature study mentioned by Kanji (1998), Dale *et al.*, (2000) and McAdam (2002) that the role of ISO 9000 was valued as not optimal enough and should be followed by TQM practice to improve the company performance such as user satisfaction. Referring to Kanji (1998), Dale *et al.*, (2000) and McAdam (2002) that the application of TQM could fill the gap in this research and decided as the mediating variable for ISO 9000 towards the Company Performance.

The human resources aspect, which is employee behavior, becomes an important consideration for future researchers related with the implementation of ISO 9000 to reach the Company Performance (Ilkay and Aslan, 2012). Employee behavior, such as quality awareness, employees competence, and motivation to create quality products becomes a strategy for ISO 9000 to improve the Company Performance. Many companies are considered successful in reaching their goals mainly because they put emphasis on empowering human resources. High quality human resources are unique; competitors would find it difficult to simply adopt a company's high-skilled human resources.

It is the important role of human resource, the employee behavior in particular, that the researchers take it as the mediating variable in ISO 9000 towards Company Performance.

The goal of the implementation of ISO 9000 is to improve Company Performance (Starke *et al.* 2012). The more controlled the documentation organization within the ISO 9000 system, the more employee's awareness on quality and the more probable the company to improve employee's competence and to create quality motivation (Ilkay and Aslan, 2012). Once employee behavior is more manageable, it will be easier for the employee to apply TQM which, in turn, improve the company's performance (Ilkay and Aslan, 2012; Mehra and Ranangathan, 2008). Previous study conducted by Starke *et al.*, (2012) in Brazil concluded that the implementation of ISO 9000 was able to improve the Company Performance. This is very different with the research conducted by Ilkay and Aslan (2012) in Turkey showing that the implementation of ISO 9000 was still not able to improve the Company Performance. This obscurity caused the researchers to examine the Implementation of ISO 9000 towards the Company Performance with the mediating aspects such as Employee Behavior and TQM Practice in manufacturing company in Indonesia specifically in East Java based on the enactment of China Asean Free Trade (CAFTA) since January 1, 2010.

2. Literature Review

2.1 ISO 9000

ISO stands for International Organization for Standardization (Gonzales *et al.* 2007), and 9000 is the numerical code showing quality management system. ISO 9000 is a serial standard of quality management system that was developed by international organization for qualification in Geneva, Switzerland (Han *et al.* 2007). Rothery (2000) stated that ISO 9000 is the implementation of documentation system to assist management in creating

quality products appropriate with the requirements.

ISO 9000 is the acknowledgement that a company is implementing a quality management system according to the international standard through the documentation procedure such as employing the quality system, the document control, and the internal quality auditing. The indicator of ISO 9000 is reflective referring to the research conducted by Embrahimpour *et al.*, (1997) for document control indicator and Han *et al.*, (2007) for internal quality auditing and quality system.

There are just not many researches assessing ISO 9000 according to the internal perception, which is the performer's perception. The result of this research will increase the theoretical assessment about ISO 9000 according to internal company perception.

2.2 Company Performance

The company practices the measurements of performance to perform the evaluating activity, controlling, and improving the operational process to accomplish the company objectives (Ghalayini and Noble, 1996). The gathered information from the measurements of company performance has to be complete, relevant, and timely.

The company performance is a measurements used by the company to recognize the goal description that will be accomplished such as the user satisfaction, sales growth, and market share. The indicator of Company Performance tends to be reflective referring to the research conducted by Han *et al.*, (2007) for the user satisfaction and market share indicators, on the other hand referring to Haversjo (2000) for the sales growth indicator.

2.3 TQM Practice

Mehra *et al.*, (2001) explained TQM as the organizational philosophy that needs to be participated by the whole employees in every level to be more focus in the effort of continuous product quality management. The discussion about quality has two main dimensions, which are high design and continuity. There are lots of studies discussing about quality reviewed from the high design dimension. While the quality assessment reviewed from the continuity dimension is still considered as infrequent. This research is explaining the implementation of ISO 9000 as the theoretical assessment that impacts the process to create a good quality product that has a high continuity level. Besides, Das *et al.*, (2008) has mentioned about the development of TQM assessment from late back until now, that there are many different arguments about measuring TQM as the effort of improving the continuity improvement to user satisfaction. The rareness of quality assessment reviewed from the perception of continuity can add the information of TQM knowledge.

TQM practice is the effort of the employees to improve the company performance through improvement of the continuous management by using the resources to create quality products by company program marked by the activity of continuous improvement, customer focus, and employee involvement. This three indicators of TQM Practice tend to be reflective referring to the research by Das *et al.*, (2008).

2.4 Employee Behavior

The employee behavior variable comes as the mediator by the suggestion of Ilkay and Aslan (2012). Employee behavior is the behavior done by the employee to reach the organizational purpose. Three indicators, which are quality awareness, quality competence, and quality motivation, reflect the employee behavior. The result of this research fills the gap in measuring the employee behavior theory.

2.5 Formulation of Hypotheses

Since the ISO 9000 was established (in 1987, ISO 9000:1987), there were many experts argued that the adoption of ISO 9000 could improve the company performance. This was proven by the research conducted by Jain and Ahuja (2012) in India finding that the Implementation of ISO 9000 could improve the performance of manufacturing company. Thus the research of Starke *et al.*, (2012) in Brazil concluded that the Implementation of ISO 9000 could improve the Company Performance.

H1: The implementation of ISO 9000 could improve the Company Performance.

The urgency of this research is referring to the significant role of human resources factor, which is Employee Behavior as the company strategy to reach the affectivity of TQM company program. Then it is important to be studied in order to fill the theoretical gap of the ISO 9000 theory assessment thus it could improve the Company Performance. The more controlled the documentation system of ISO 9000 the more it will improve the employee behavior to be aware of quality, improve the employee competence, and creating quality motivation (Ilkay and

Aslan, 2012). The more positive employee behavior the easier it is for the employee to apply TQM that would improve the company performance (Ilkay and Aslan, 2012; Mehra and Ranangathan, 2008).

H2: The employee behavior that aims toward the affectivity of TQM Practice could be the strategy for implementing ISO 9000 to improve the Company Performance.

3. Methodology

The research design is quantitative, causality, positivist and mainstream approaches, and survey method. Gathered data used perceptual approach that assists the measurements using the Likert 5 points scale. Highest point (5) responded very agree until the lowest point (1) responded very disagree.

There were 248 large-scale manufacturing companies certified with ISO 9000:2008 that are still active in East Java, Indonesia such as electronics, drugs, garments, chemicals, and housing industries as the research samples. The analysis unit is the manufacturing company. The respondent is Representative management, which is the person who is responsible to the implementation of ISO 9000, such as quality manager, production manager, etc. The sampling uses simple random sampling by lottery and considering that every analysis units has the same chance to be the sample. To examine and know the effect among variables, the research uses structural equation modeling assisted by AMOS program.

4. Variables and Research Indicators

Figure 1 in the following explains about the latent variables, indicators, and tested structural modeling. The explanation of the symbols is provided in the following.

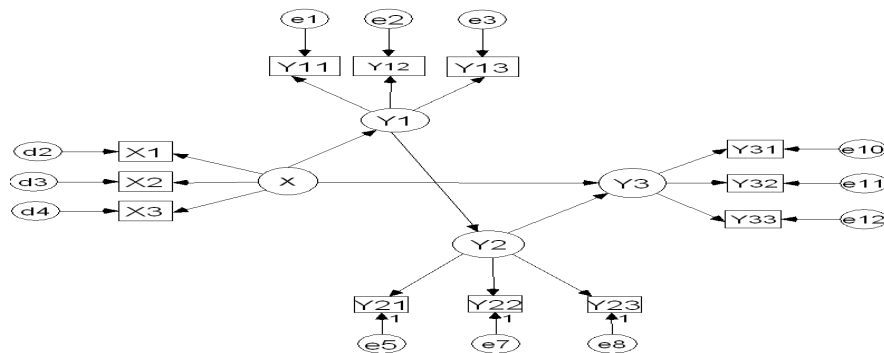


Figure 1. Structural Equation Modeling.

X = ISO 9000	Y1 = Employee Behavior	Y2 = TQM Practice	Y3 = Company Performance
X1= <i>Quality System</i>	Y11 = Quality Awareness	Y21 = Customer Focus	Y31 = Customer Satisfaction
X2= <i>Correction Action</i>	Y12 = Quality Competence	Y22 = Continuous Improvement	Y32 = Market Share
X3 = <i>Internal Quality Auditing</i>	Y13 = Quality Motivation	Y23 = Employee Involvement	Y33 = Sales Growth

5. Result

5.1 Structural equation modeling evaluation

The answers of the questionnaire have been statistically evaluated resulting in decent validity and reliability levels. The researchers conducted confirmatory factor analysis examination for five latent variables and it was tested resulting in decent one-dimensional and reliability levels. The next step was conducting the structural equation modeling evaluation assisted by the AMOS program to examine the causality relationship among research variables. The structural equation modeling evaluation according to Han *et al.*, (2006) and Arbuckle & Wothke (1995) includes the absolute fit measure such as Chi-Square, RMSEA (Root Mean Square Error of Approximation), GFI (Goodness of Fit Index), and TLI (Tucker-Lewis Index). A model is stated as good is one or two criteria of Goodness of Fit fulfill the required cut-off scores.

The result of structural equation modeling evaluation is shown by the standardized weights provided by the following figure:

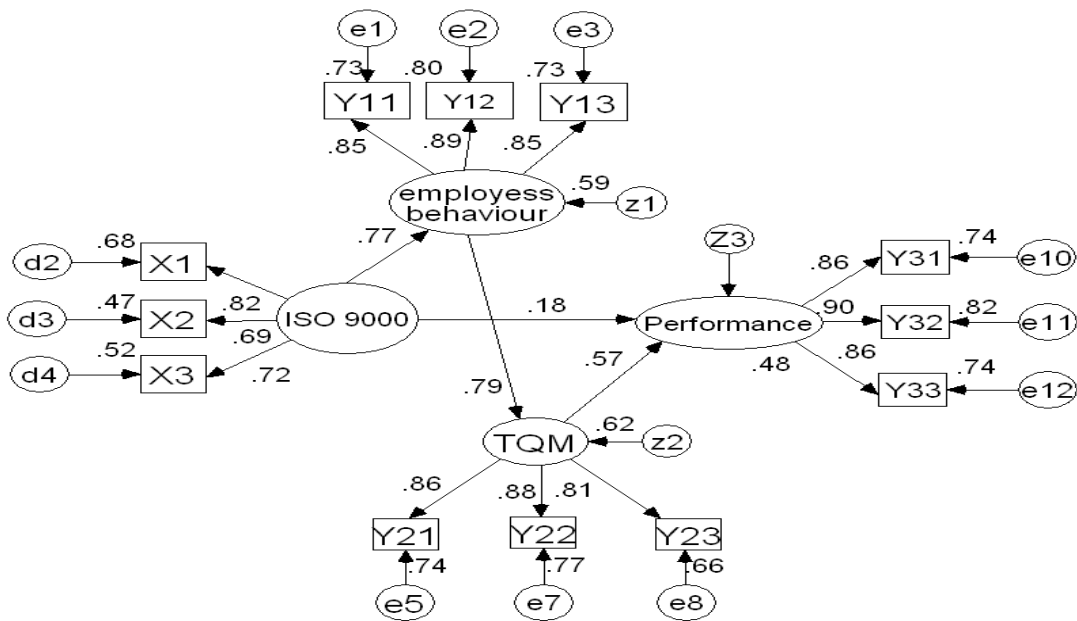


Figure 2. Coefficients of Weight Standardized in Structural Equation Model.

Evaluation of goodness of fit in structural equation model provided by the following table:

Table 1. Result of Goodness of Fit Evaluation in Structural Equation Modeling

Goodness of fit indices	Result	Cut-off value	Statement
χ^2 (Chi-Square)	92.371	Expected to be less	Marginal
Probability (p)	0.000	≥ 0.05	Marginal
Chi-Square/DF	1.847	≤ 2.00	Good
RMSEA	0.075	≤ 0.08	Good
GFI	0.961	≥ 0.95	Good
TLI	0.976	≥ 0.95	Good

According to the non-absolute measure, it shows that the result of goodness of fit evaluation in structural equation model such as the score of Chi-Square/Degree of Freedom, RMSEA, GFI, and TLI have fulfilled the required criteria. Hair *et al.*, (2006) explained that a model considered as good if one or two criteria of Goodness of Fit fulfilled the required cut-off score. Referring to the suggestion by Hair *et al.*, (2006), the structural equation model that was built has the same score as the empirical research data thus accepted as the model/analytical device to predict the causal relationship among research variables.

5.2 Path Analysis Evaluation of Research Variables

The causal relationship among latent variables is explained by using path analysis to examine the direct and indirect impact of exogenous variables towards the endogen.

Table 2. Relationships of Research Variables and Hypothesis Evaluation

Variables				Standardized Coefficient Impact			result
Independent	Mediator 1	Mediator 2	Dependent	Direct	Indirect	Total	
ISO 9000	-	-	Company Performance	0.18	-	-	H1- Rejected
ISO 9000	Employee Behavior	-	-	0.77*	-	-	-
-	Employee Behavior	TQM Practice	-	0.79*	-	-	-
-	-	TQM Practice	Company Performance	0.57*	-	-	-
ISO 9000	Employee Behavior	TQM Practice	Company Performance	0.18	$0.77^* \times 0.79^* \times 0.57^* = 0.347^*$	0.527	H2- Accepted

Note: All coefficients are significant at level 0.05 (when identified by *)

The test result of direct impact of the implementation of ISO 9000 certification towards company performance was proven insignificant, the probability score was $0.12 > 0.05$. The implementation of ISO 9000 certification has significant impact towards the Employee Behavior proven by the probability score of $0.000 < 0.05$, and Employee Behavior also has significant impact towards TQM Practice that proven by the probability score of $0.00 < 0.05$ followed by TQM Practice that has significant impact towards Company Performance. The relationship among research variables proves that Employee Behavior and TQM Practice are able to do continue mediation from the exogenous variable which are the Implementation of ISO 9000 towards the endogenous variable, which are Company Performance. Continue Mediation is which two or more mediating variables that flow continuously and has significant meaning from the exogenous variables into the endogenous.

The collected information from Table 2 shows that the Implementation of ISO 9000 Certification has not been able to give significant direct impact towards the User Satisfaction by the standardized coefficient score of 0.18. The indirect impact of the Implementation of ISO 9000 Certification variable towards the Company Performance was mediated by Employee Behavior continued by TQM Practice variable could prove the significant impact by the standardized coefficient score of 0.347. The direct impact of ISO 9000 Implementation towards the Company Performance was not proven as significant, while Employee Behavior and TQM Practice could continue mediation. Thus, the mediating variables of Employee Behavior and TQM Practice called as full/perfect continue mediation. Therefore, the role of Employee Behavior and TQM Practice variables could be the strategy for ISO 9000 Implementation to improve the Company Performance.

6. Hypotheses Proof

There were two research hypotheses as described in the following:

H1: The Implementation if ISO 9000 could improve Company Performance

Table 2 proves that the Implementation of ISO 9000 has insignificant direct impact towards the Company Performance. The first research hypothesis stated that the Implementation of ISO 9000 could improve the Company Performance was not be able to be tested. The result of hypotheses proof supports the research finding by Ilkay and Aslan (2012) that conducted a research in Turkey by concluding that the implementation of ISO 9000 could not directly impact the company performance. This hypothesis proof is different with the research finding conducted by Strake *et al.*,(2012) in Brazil that concluded that the Implementation of ISO 9000 could improve the Company Performance. It needs to conduct an investigation to evaluate the difference in researches.

H2: Employee behavior leading to the affectivity of TQM Practice could be the strategy for Implementing ISO 9000 to improve the Company Performance.

In Figure 2 it was provided the regression variable lines of employee behavior towards the TQM Practice, this line is the mediation line of two mediating variables. In this position, both variables (Employee Behavior and TQM Practice) cooperatively became the mediating variables in structural equation modeling. Both mediating variables were articulated as the strategy for ISO 9000 to improve Company Performance.

Table 2 proves that the Implementation of ISO 9000 has significant impact towards the Employee Behavior, and Employee Behavior also has significant impact towards TQM Practice, and followed by TQM Practice has significant impact towards Company Performance. Thus, the second research hypothesis stating that Employee Behavior leading to the affectivity of TQM Practice could be a proven strategy in Implementing ISO 9000 to improve Company Performance. This hypothesis proof could fill the theoretical gap just as suggested by Ilkay

and Aslan (2012) that stated to consider factors such as employee behavior and TQM practice to be tested on the relationship of ISO 9000 towards Company Performance.

7. Discussion

7.1 Implementation of ISO 9000 Certification

ISO 9000 provides a degree of standardization and procedure control. ISO 9000 standardization assists the manager to re-examine all the processes of operational production and identify if there was discrepancies based on the recorded document. ISO 9000 is more focusing on the process rather than the outcomes (Ozturk and Swiss, 2008). Besides, ISO 9000 makes the bureaucracy in the company to be less complicated.

The implementation of ISO 9000 certification reflects three management activities as the indicators, which are Quality System, Correction Action, and Internal Quality Auditing (Embrahimpour *et al.* 1997; Han *et al.* 2007). The result of confirmatory test analysis factor of the Implementation of ISO 9000 Certification variable proves that the Quality System indicator is able to apply the ISO 9000 implementation as the most advantageous among the others. Quality system is a regulation in an organization to be regulated, controlled, and evaluated in every operational activity in order to produce a quality product. The quality system in ISO 9000 sets numerous things, such as steps to adapt the product quality with the market demands, documents, quality policies, quality system procedures, standard operating procedures and forms.

The result shows that certified manufacturing companies in East Java were proven to be able to build and develop a decent quality system in implementing the documentation based on the ISO 9000. Moreover, the certified companies were able to build a communication system with the co-workers about the policy of product quality that need to be implemented before the production process. The communication system was build through regular meeting and the communication technology.

Chowdhury (2014:10) stated that the development of Quality System needed to be well prepared in the organization for the international standard accreditation requirements such as the ISO 9001-9003 or the other standards that could acquire business values and organizational development. Quality System becomes the reliable factor in operational activity of the company especially in production to produce continuous quality products. Quality system is able to assist the employee in processing the company sources and creating quality products as expected. Quality System is also able to assist the employee in conducting improvement of the product, processes, and overall performance of the organization (Siyakumar *et al.* 2014).

There were many certified companies that have failed in producing quality product because of the bad quality system design. There also many of them that failed to be certified because of the quality system that has not been tested yet.

7.2 Employee Behavior

Employee behavior is the behavior of the workers to reach the company goals. The employee behavior is reflected by three factors, which are quality awareness, quality competence, and quality motivation. Quality awareness includes the motive to create quality products, quality competence includes the ability of the employee to create quality products, and quality motivation is the motivation of the employee to create quality products. The employee behavior is very depending on the knowledge that the employee has.

The result of the confirmatory test for employee behavior factor (quality awareness, quality competence, and quality motivation) proved that those three are the factors that existed in the manufacturing companies that are being studied. The quality competence has superior role than other the others. The research found that the employee behavior is most likely reflected by the quality competence, which means that certified manufacturing company has the employees that are able to work and produce quality products as the customers' requirements.

The empowerment of human resources is the key factor for many companies to reach their goals. Training and educating are also the key components for the employees to obtain the work competence in order to run the quality program. The main obstacle of human resources empowerment is low education (Mosadeghrad, 2013).

In the previous study, Amar and MohdZain (2012) had gathered data some obstacles in implementing ISO 9000, which were competent personnel, competence support, internal communication support, resource quality, infrastructure quality, and process control. There were individual factors from the workers that became obstacles for the company such as, high employee turnover, insufficient education level of workers, indiscipline low worker morale, and lack of skill among workers.

7.3 TQM Practice

TQM practice is a work program that regulated by the company by observing the management principals. TQM as the organizational philosophy needs the employee participation focusing on the continuous quality

improvement (Mehra *et al.*, 2001). Mosadeghrad (2013) stated that techniques and devices to reach the excellence business performance must support the enactment of management principals in the TQM work program. There is no standard method to perform the management principals in applying TQM in order to reach good outcomes (Mosadeghrad, 2013). Consequently, some organizations have similarities in applying the TQM program, but there might be differences in performing the management principals with different outcomes.

In this research the TQM Practice is reflected by three management aspects, which are customer focus, continuous improvement, and employee involvement. Customer focus includes the employee efforts to always match the product quality with the market signal that is suitable with the demand of the customer. Continuous improvement includes the employee efforts to perform the product quality improvement based on market signal. Employee involvement includes the participation of the employee in performing quality work program.

The confirmatory test result for three management principals (customer focus, continuous improvement, and employee involvement) proved that all of the three principals are able to confirm TQM Practice in the manufacturing companies that are being studied. Continuous improvement has superior role than the other management principals. This research found that the advantage of quality work program in manufacturing company is performing quality management principals based on continuous improvement.

The research finding matched with Mosadeghrad's (2013) statement that said TQM was a quality management strategy to improve the performance by providing quality products and services through teamwork and continuous improvement. The success of TQM Practice needs management principals as the clear and easy-to-apply concepts that fit the company condition (Mosadeghrad, 2013). TQM is not only a theoretical explanation, but it is more than that. It is an abstract concept to be explained but it is easy to be performed. Some experts tried to give explanation about TQM, for instance Flynn *et al.*, (1994) explained that TQM is an approach, a process (Almaraz, 1994), a program (Joss and Kogan, 1995), a technology (Camison, 1996), a culture (Kanji and ui, 1997), a system (Hellsten and Klefsjo, 2000), a strategy (Harvey and Brown, 2001), a philosophy (Joyce *et al.*, 2006), and a technique (Wong *et al.* 2010). The confirmatory result of three aspects that were tested (customer focus, continuous improvement, and employee improvement) indicated that TQM is a program that fits Jos and Kogan's (1995) opinion. In reality, TQM can be understood and implemented according to the company condition. Manager, head, and academics are given the autonomy to understand TQM with different kind of goals.

7.4 Company Performance

The company performance is an operational business achievement that becomes the company goals. Feng *et al.*,(2008) divided performance into two categories in which were operational performance and business performance.

In this research, the company performance was reflected by three achievements that were user satisfaction, market share that referred to the suggestion by Han *et al* (2007), and sales growth referred to Haversjo (2000). The implementation of ISO 9000 was considered as the developing aspect in production process. Thus, in this research, it was Company performance that is considered as the operational performance category.

This research measured the user satisfaction based on the perception of employee efforts to satisfy the customer, level of employee's perspective in dealing with customer complaint, the returned products and keeping the satisfied customers. Market share became the part of measuring company performance. The market share included the employee effort to expand the market by increasing the number of new buyers measured by the perception of employee effort. Besides, sales growth is also became the part of measuring company performance. Sales growth is measured by level of user perception in keeping the business transaction.

The result of confirmatory test in company performance factor was user satisfaction, market share, and sales growth proved that they were able to confirm the company performance of the studied manufacturing company. Market share has superior role compared to the others, especially it showed the increase of customers. This research found that certified company performance achievement indicated by the ability of the employee to expand the market by increasing the number of new customer.

7.5 The impact of Implementing ISO 9000 towards Company Performance

ISO 9000 standardization supports to guarantee that the organization or the company has already performed the documentation system through correct procedures. The procedure in documentation system is able to assist the employee to create products that is according to the customer requirements. Therefore, the standardization could guarantee the quality consistency rather than improving the quality product of the company (Tsiotras and Gotzamani,1996). Some company managers believed that ISO 9000 standardization could guarantee the

existence of quality products (Camgoz-Akdag,2007). It has been previously explained by the experts that ISO 9000 standardization could guarantee the implementation of correct quality system, not the output. (Mosadeghrad,2013). Functionally, ISO 9000 does not guarantee the work improvement (Curkovic and Pagell, 1999; Martinez-Costa *et al.* 2009).

The test result showed that the implementation of ISO 9000 certification has not been able to improve the company performance yet. It indicated that the documentation control of the studied company has not been able to directly improve the performance. The role of mediation is of course very necessary for ISO 9000 in order to increase the performance or looking for obstacles. The result justified the point from Curkovic and Pagell (1999) and Martinez-Costa *et al.*,(2009) that there was nothing could guarantee that the Implementation of ISO 9000 could improve the company performance. Previous study conducted by Terziovski *et al.*,(1997) reported that ISO 9000 has no positive impact towards the organizational performance in New Zealand and Australia. Sun and Cheng (2002) have also reported that ISO 9000 certification could not improve business performance for companies in Norway. In the last decade, Ilkay and Aslan's research in Turkey proved that "there was no statistically significant difference between certified and non-certified companies in terms of performance". On the other hand, Jang and Lin (2008) found a positive relationship between the implementation of ISO 9000 and company performance. Also in the last decade, Jain and Ahuja (2012) conducted research that focused on the significant contributions of ISO 9000 implementation success towards manufacturing performance in India. Different results are natural, but it is essential for the researchers to look for the blocking factors of the ISO 9000 implementation or ISO 9000 strategy to improve the performance.

7.6 Continuous Mediation: Employee Behavior and TQM Practice

In the evaluation of ISO 9000 Implementation towards the Company Performance, the position of employee behavior and TQM practice variables were as the mediator. There are directions of the employee behavior variable towards the TQM practice variable showing that both variables as the continuous meditation (see Table 2). The result of the test showed that employee behavior and TQM practice could continuously mediate for the implementation of ISO 9000 towards the studied company performance. This research found that the employee behavior leading to the success of TQM practice could be the internal strategy for the ISO 9000 certified company to improve the company performance.

In forth, this research found that the quality system, which is the implementation documentation in ISO 9000 standardization, could give positive competence for the employee to apply the TQM that will lead to company performance improvement. The employee competence is shown by the ability of the employee to create quality product. The more ability the employee has to create quality product, the easier it is to perform continuous quality product. Both of these effects, competence and continuous quality improvements are able to improve the company performance by its market share.

The research result justify the view of Ilkay and Aslan (2012:771) that suggested to examine some mediating variables such as employee behavior and quality application in relation of ISO 9000 with the performance. Also considering that "ISO 9000 certification alone cannot improve performance". This paradigm is essential for the development of ISO 9000 standardization knowledge in the coming future.

8. Conclusion and Limitation

The implementation of ISO 9000 has not been able to directly impact the performance of certified manufacturing company in East Java, Indonesia. The employee behavior that oriented in total quality management could be a strategy for ISO 9000:2008 implementation to improve the company performance. Quality system, which is the enactment of documentation system in ISO 9000 standardization, is able to give positive competence for the employee to apply TQM that will lead to company performance improvement. Employee competence is shown by the ability of the employee to create quality product. The more ability the employee has to create quality product, the easier it is to perform continuous quality product. Both of these effects, competence and continuous quality improvements are able to improve the company performance by its market share.

The result of structural equation modeling evaluation shows not much difference to accept the model as an analytical device. Besides, the information source gives different sums about the total number of certified manufacturing company in East Java, this complicates the decision of sampling method.

9. Future Research

The analytical result of Structural Equation Model in this research shows that the Employee behavior variable is more to be applied by the employee competence indicator and TQM practice variable for the continuous quality

improvement. Related with the ISO 9000 examination towards the performance, it is recommended to test the competence of employee and continuous improvement as continuous mediation. The recommendation of structural equation model is provided in the following Figure 3:

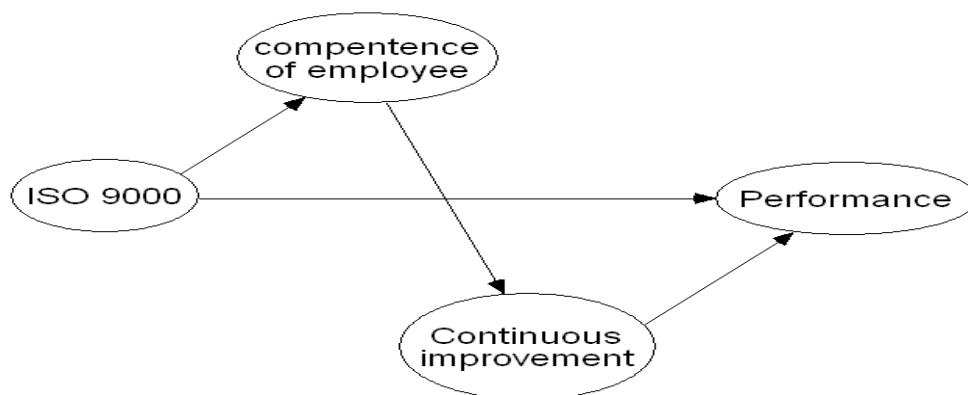


Figure 3. Structural Equation Modeling for Future Research

10. Social Implication

Certified manufacturing company in East Java, Indonesia is suggested to have a credible internal audit employee. The employee is needed to join the ISO 9000:2008 formal training. The certified manufacturing company needs to perform an internal audit that periodically regulated and planned. The implementation of ISO 9000 standard has been proven to give positive competence for the employee. Thus, it is essential for the quality manager to grade the level of his employee to clarify the human resources that the company owns.

Notes on First Contributor

Hariato Respati is a lecturer in the Faculty of Economy and Business in Merdeka University of Malang, Indonesia. His research interest covers the field of quality, operational management, information technology and marketing. He is an active teacher in the doctorate program, and until now is a statistic consultant in the field of management for ISO 9001 certified manufacturing company.

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