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THE IMPLEMENTATION OF QUALITY CIRCLE CONTROL, ORGANIZATIONAL CULTURE, AND ORGANIZATIONAL PERFORMANCE IN MSMEs IN INDONESIA

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ABSTRACT

In the era of globalization, competition is opened, this also happens among MSMEs. In this condition, MSMEs are expected to produce quality products and services. At present, the strategy that can be done is the implementation of the Quality Control Circle (QCC). They can increase the quality of products or services produced, and the better employee performance levels so as to produce high-quality products with the implementation of QCC. Based on the literature review, the Quality Control Circle (QCC) is a very competitive tool in improving the quality of products or services, but in the QCC implementation process, there were many obstacles and failures. One of the factors was the limited research and literature on the implementation of the QCC and the variables that influenced it. The purpose of this study was to investigate the relationship between organizational culture, QCC implementation, and Organizational Performance. There were nine constructs of QCC implementation six factors of organizational culture, and two Organizational Performance factors that were used to investigate the relationship of each variable. Data collection was conducted by distributing questionnaires to MSMEs in Bandar Lampung and outside Bandar Lampung. The results of this study indicated a significant relationship between Organizational Culture on QCC implementation and QCC implementation on Organizational Performance in MSMEs in Indonesia.

Keywords: Organizational Culture; QCC Implementation; Organizational Performance

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INTRODUCTION

In the era of globalization, free market competition is opened, it causes the strong business competition among MSMEs products both in national and international markets. In this condition, MSMEs are faced with free trade and the same market segment. To deal with the current conditions, Micro, Small and Medium Enterprises (MSMEs) are required to increase the quality of products or services produced, and the level of employee performance so that they can produce products that fit the quality standards that consumers are interested in. (Aziz, 2016)

According to Aziz and Morita (2016) the ability to produce the goods on best quality or services is a very important factor to be considered. For consumers, the quality is the way the product works according to the purpose of its manufacture. Quality control is the creation of quality standards and the measurement of finished goods conformity or services to certain the standards. The quality control of a product merely checks the product before it is marketed. (Machfoedz and Mahmud, 2007)

The implementation of the quality control circle (QCC) has been applied by big companies and business people of micro small and medium enterprises (MSMEs) as a tool to gain the efforts of improving the quality and the long-term competitiveness and profitability by improving the implementation of quality control circle (QCC) continuously (Ong, 2015).

The quality control group is the core of the organization in solving quality problems and a small group in the same workplace, which voluntarily meets to discuss quality-related issues, to find the cause, was offering a problem-solving proposal, and take corrective action (Ishikawa, 1992). According to Crocker, Chiu in 2007, the quality control group has three main objectives. First, to contribute for the improvement and development of the company. Second, to respect the dignity of humans in their efforts to develop themselves and create a workplace that is meaningful to them. Third, to describe the existence of new possibilities that are better in quality problem-solving efforts.

In a previous study, "Development of Instruments in the Implementation of Quality Control and Organizational Performance in MSMEs" (Aziz et al. 2018) was discussed, this study discussed about the development of instruments in the implementation of Quality Control Circle and Organizational Performance in MSMEs. This study has 13 instruments to measure valid and reliable levels in implementing QCC and Organizational Performance in MSMEs that are often found and faced by MSMEs in goods and services. In collecting data, a questionnaire was distributed to MSMEs. The results of this study found evidence that 13 Valid and Reliable instruments in implementing the QCC and Organizational Performance in MSMEs.

Continuing the previous research that this study investigated the interaction (relationship) between organizational culture, implementation of Quality Control Circle, and Organizational Performance in MSMEs in Indonesia.

LITERATURE REVIEW

Organizational Culture

According to Robbins & Timothy (2012), organizational culture is a system of understanding that is accepted collectively regarding patterns of trust, ritual, myths of practice that have developed more than a long time ago. Meanwhile, according to Gibson, et al in Anwar (2016) said that organizational culture is a value system with shared beliefs that produce norms, behaviours, values (which one is important) and

beliefs (how it works) integrating raises the norm of how we should do something. Culture performs a number of functions within an organization, namely: culture has a role setting boundaries, meaning that culture creates a clear distinction between one organization and another, culture provides identity for members of the organization, culture facilitates the emergence of broad commitment and individual interests, culture enhances the social system, culture as a mechanism for making meaning and control that guides and shapes the attitudes and behaviour of members. Characteristics of organizational culture are individual initiatives, tolerance of risky actions, direction, integration, leadership support, tool control, identity, reward, tolerance for conflict and communication patterns. (Robbins & Timothy, 2012).

Aziz (2016) examined about the relationship of national culture and organizational culture to the implementation of the QCC, with the finding that national culture and organizational culture significantly influenced the QCC implementation. While, Muhammad Kurniawan (2013) examined organizational commitment, organizational culture and job satisfaction on the implementation of the QCC, with the finding that organizational culture has a significant effect on QCC implementation.

Quality Control Circle

Ishikawa (1992) defines that QCC as a small group that voluntarily carries out quality control activities in the same workplace. This small group carries out quality control continuously as part of control and repair activities in the workplace, by utilizing control techniques that involve the participation of all members.

According to JUSE (Union of Japanese Scientists and Engineers, 1991), QCC is a small working group that voluntarily carries out quality control activities within their own workplaces. This small group fully participates continuously as part of the company's overall quality control activities, develops itself as well as joint development, control and improvement within the workplace used quality control techniques. The main points of the QCC activities are voluntary activities, group activities, everyone's participation, application of quality control techniques.

Hasibuan (2007) stated that QCC is a small group of work that voluntarily conducts control and continuous improvement activities used quality control techniques. QCC is a small group of workers who have a leader in which the group is formed according to the field of work to solve problems found in the field of work (Charney, 2007).

The purpose of the QCC Implementation is to improve employee morale which is also a useful channel in bringing improvements to the appearance of group members and all members of the organization for the advancement of all parties. From these objectives, the application of the QCC has the benefit of increasing the level and quality of work within the cluster concerned. Improvement of work basically has the meaning as an improvement and improvement of the quality of both the quality of management, quality of service and the quality of other elements in the organization such as the quality of procedures, work results, input, employees or human resources, cooperation, effectiveness, power output, work attitude, work environment, information on problem solving abilities, manners, use of resources, quality of implementation, appearance and others. (Zainun, 2001)

Ronald Sukwadi (2012) conducted a study on the analysis of the QCC implementation of employee performance and satisfaction, with the finding that QCC implementation affects employee performance and job satisfaction. Meanwhile, Matheous Tamonsang and Djojo Dihadjo (2017) conducted a study on the effect of job satisfaction and organizational commitment on employee performance with the implementation of the QCC, with the finding that the QCC implementation is very important as a moderating variable to explain the effect of job satisfaction and organizational commitment on employee

performance.

RESEARCH METHOD

Based on the background above, we developed a framework for examining the extent to which six constructs of organizational culture, nine constructs of QCC implementation, and two constructs of Organizational Performance exist in MSMEs in Indonesia. We also investigated the influence of organizational culture on QCC implementation and how much influence the QCC implementation had on increasing Organizational Performance were measured by financial and non-financial performance. In this theoretical research framework, the independent variables were organizational culture, QCC implementation, and the dependent variable was Organizational Performance.

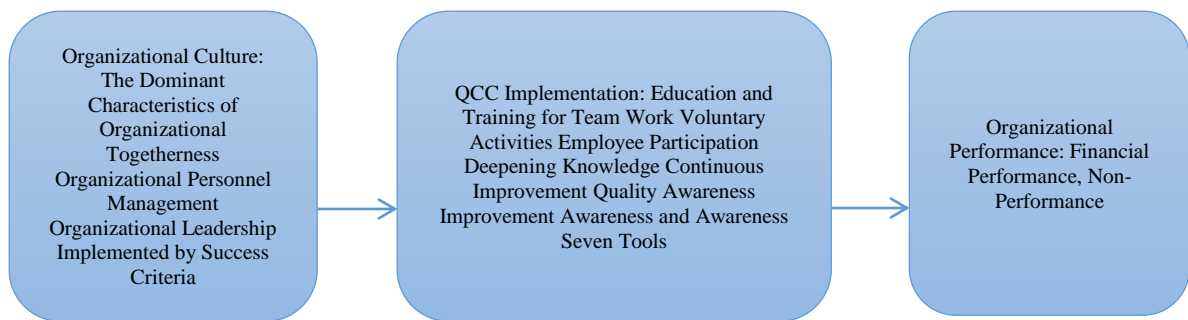


Figure 2.1 The Conceptual Framework

From the frame of mind above we developed four hypotheses. The first hypothesis addressed the relationship between six organizational cultural factors and nine constructs of QCC implementation. Disa (2011) conducted a study of the implementation of QCC and work culture with the findings that QCC implementation has an effect on the work culture of employees both jointly and partially.

H1: Organizational Culture significantly influenced QCC Implementation.

The second hypotheses discussed the relationship between the nine constructs of QCC implementation and two variables of Organizational Performance. Whereas Ronald Sukwadi (2012) examined the implementation of QCC, Organizational Performance and job satisfaction with the findings of QCC implementation affecting employee performance and job satisfaction.

H2: Implementation of QCC significantly influenced Organizational Performance.

In data processing, we used IBM-SPSS version 20. We performed multiple linear regression testing to answer H1 and H2. Multiple linear regression was a statistical analysis that connects between two independent and more independent variables. The goal was to measure the intensity of the relationship or the influence between independent variables and dependent variable which were able to estimate the value of Y to X. (Rambat, 2015)

FINDINGS AND DISCUSSION

Based on the data used in this study there were six factors of organizational culture, nine constructs of QCC implementation, and two factors of Organizational Performance. Distribution of 150 questionnaires to MSMEs in Bandar Lampung and outside Bandar Lampung, but there were only 114 questionnaires that could be processed because they had implemented the QCC.

Table 3.1 presented multiple linear regression analysis used six organizational culture factors as independent variables and nine constructs of QCC implementation as the dependent variable.

Table 3.1 Analysis of Multiple Linear Regression between Organizational Culture and QCC Implementation

Organizational Culture	education and training			Voluntary Activities			Team Work		
	R = 0,424			R = 0,330			R = 0,430		
	F-value = 3,905			F-value = 2,176			F-value = 4,054		
	Significance = 0,001			Significance = 0,051			Significance = 0,001		
	β	t	Sig.	B	t	Sig.	B	t	Sig.
Dominant Characteristics	-0,291	-1,919	0,058*	-0,228	-2,136	0,035*	-0,225	-2,366	0,020**
Organizational Leadership	-0,119	-0,770	0,443	-0,156	-1,426	0,157	0,041	0,421	0,675
Personnel Management	0,261	1,182	0,240	0,236	1,515	0,133	0,207	1,495	0,138
Organizational Togetherness	-0,348	-1,978	0,051*	0,056	0,455	0,650	0,059	0,535	0,594
Applied Strategies	0,024	0,140	0,889	0,169	1,392	0,167	0,125	1,160	0,249
Success Criteria	0,486	2,957	0,004**	0,031	0,270	0,788	0,220	2,144	0,034*
Organizational Culture	Employee Participation			Knowledge Deeping			Continuous Improvement		
	R = 0,546			R = 0,359			R = 0,444		
	F-value = 7,584			F-value = 2,642			F-value = 4,388		
	Significance = 0,000			Significance = 0,022			Significance = 0,001		
	β	t	Sig.	β	t	Sig.	β	t	Sig.
Dominant Characteristics	0,031	0,252	0,802	0,252	2,701	0,008**	-0,071	-0,782	0,436
Organizational Leadership	0,206	1,610	0,110	0,097	1,023	0,309	0,304	3,299	0,001**
Personnel Management	0,683	3,751	0,000**	-0,039	-0,287	0,775	0,061	0,464	0,644
Organizational Togetherness	0,326	2,248	0,027*	-0,195	-1,807	0,074*	0,133	1,272	0,206
Applied Strategies	-0,057	-0,401	0,689	0,204	1,930	0,056*	-0,280	-2,733	0,007**
Success Criteria	-0,234	-1,728	0,087*	0,093	0,918	0,361	0,167	1,705	0,091*
Organizational Culture	Quality Awareness			Problem and Improvement Awareness			Seven Tools		
	R = 0,371			R = 0,436			R = 0,466		
	F-value = 2,838			F-value = 4,190			F-value = 4,960		

	Significance = 0,013			Significance = 0,001			Significance = 0,000		
	β	t	Sig.	β	t	Sig.	β	t	Sig.
Dominant Characteristics	-0,151	-1,327	0,187	-0,012	-0,115	0,908	0,107	0,708	0,481
Organizational Leadership	0,330	2,846	0,005**	0,216	2,092	0,039*	-0,188	-1,212	0,228
Personnel Management	-0,032	-0,195	0,846	0,091	0,617	0,538	0,188	0,852	0,396
Organizational Togetherness	0,097	0,736	0,463	-0,066	-0,566	0,573	-0,286	-1,626	0,107
Applied Strategies	0,062	0,480	0,632	0,054	0,467	0,641	0,476	2,767	0,007**
Success Criteria	0,191	1,550	0,124	0,327	2,989	0,003**	0,543	3,304	0,001**

Note: * $t \geq t_{(0,05)} = 1,661$; ** $t \geq t_{(0,01)} = 2,363$

From table 3.1 were able to be seen for testing the first hypothesis (H1) organizational culture had a significant influence on QCC implementation, this justifies H1. The results were as follows:

Three factors of organizational culture had a significant influence on the three constructions of the QCC implementation. The dominant characteristics had a significant negative influence on education and training, voluntary activities and teamwork. Organizational Togetherness had a significant negative influence on education and training. Success criteria had a significant positive influence on education and training and teamwork. Three factors of organizational culture had a significant influence on the implementation of QCC employee participation. Personnel management and organizational Togetherness had a significant positive influence, while on the success criteria have a significant negative influence. Three factors of organizational culture had a significant influence on the implementation of QCC deepening knowledge. The dominant characteristics and strategies applied had a significant positive effect, while the organizational glue has a significant negative influence. Three factors of organizational culture had a significant influence on the implementation of a continuous improvement in QCC. Organizational leadership and success criteria have a significant positive effect, while the strategies applied have significant negative effects. Organizational leadership had a significant positive influence on quality awareness. Organizational leadership and success criteria had a significant positive influence on awareness of problems and awareness of improvement. The strategies applied and the criteria for success had a significant positive effect on seven tools.

Table 3.3 Analysis of Multiple Linear Regression between QCC Implementation and Organizational Performance

QCC Implementation	Financial			Non- Financial		
	B	t	Sig.	β	t	Sig.
	R = 0,517			R = 0,638		
	F-value = 4,220			F-value = 7,927		
	Significance = 0,000			Significance = 0,000		
Education And Training	0,166	1,883	0,063*	0,159	1,136	0,259
Voluntary Activities	0,221	2,053	0,043*	0,118	0,687	0,494
Team Work	0,246	2,005	0,048*	0,513	2,625	0,010**
Employee Participation	0,129	1,653	0,101	0,619	4,970	0,000**
Knowledge Deepening	0,263	2,074	0,041*	0,245	1,215	0,227
Continuous Improvement	-0,276	-2,035	0,044*	0,240	1,113	0,268

Quality Awareness	-0,107	-0,737	0,463	0,046	0,201	0,841
Problem And Improvement						
Awareness	0,236	1,762	0,081*	0,260	1,222	0,224
Seven Tools	-0,036	-0,506	0,614	-0,234	-2,085	0,040*

Note: * $t \geq t_{(0,05)} = 1,661$; ** $t \geq t_{(0,01)} = 2,363$

Table 3.3 showed the results of multiple linear regression analysis used nine QCC implementation constructions as independent variables and two Organizational Performance factors as the dependent variable. The implementation of QCC had a significant effect on Organizational Performance, this justifies H3. The results were namely six construction of QCC implementation had a significant effect on the performance of financial organizations. Education and training, voluntary activities, teamwork, deepening of knowledge and awareness of problems and awareness of improvements had a significant positive influence, while continuous improvement had a significant negative influence. Three construction of QCC implementation had a significant effect on the performance of non-financial organizations. Teamwork and employee participation had a significant positive influence, while seven tools had a significant negative influence.

CONCLUSION

From the results of the data processing and the discussion on organizational culture, implementation of QCC and Organizational Performance in MSMEs in Indonesia, the following conclusions were able to be drawn:

1. Organizational culture has a significant effect on QCC implementation. Organizational culture has a direct impact on QCC implementation. In the organizational culture, the criteria for success are the most dominant factors affecting the implementation of the QCC.
2. QCC implementation has a significant effect on Organizational Performance. QCC implementation has an important role in improving Organizational Performance. In the implementation of QCC education and training, quality awareness, teamwork, employee participation, deepening of knowledge, continuous improvement, quality awareness, problem awareness and improvement awareness and seven tools are very important constructs to be improved so that Organizational Performance can improve.

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