

Improving The Quality Of Small And Medium Enterprises In South Sulawesi - Indonesia

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Abstract: In general, Total Quality Management (TQM) is only applied in large manufacturing companies, some Small and Medium Enterprises (SMEs) are reluctant to adopt quality management. Most of the literature explains the classic barriers faced by SMEs both internal and external barriers. This study aims to formulate a strategy for implementing TQM in SMEs. This is a descriptive exploratory research by identifying and developing strategies to improve the competitiveness of SMEs in South Sulawesi, Indonesia. This study uses primary and secondary data. SWOT analysis and Quality - Selection Grid analysis are used to evaluate internal and external key factors to improve quality management. The result of this study indicates that SWOT provides a solution for SME entrepreneurs to improve the quality of their products based on alternative strategies produced so that the competitiveness of SMEs becomes better. The SWOT analysis has helped to consolidate the success factors of quality management adoption, while also being able to identify weaknesses and threats.

Keyword: product, quality management, SME, strategy

1. INTRODUCTION

Small and Medium Enterprises (SMEs) have a contribution of 60.3% to the gross domestic product and are able to contribute around 97.2% of employment (Ayandibu & Houghton [4], Fiseha & Oyelana [9]). The potential of SMEs is very large for national and local economic growth so that SMEs need attention in all aspects to improve their competitiveness (Sipa *et al.* [29], Gonçalves *et al.* [11]). The development of SMEs is able to create potential economic sources because the growth of non-oil exports increases every year. The growth and performance of SMEs is a big challenge because the global economic slowdown has affected SMEs directly, it was different when the economic crisis occurred in 1997. The challenge to improve the competitiveness of SMEs has become a priority issue among academics, especially related to the issue of quality management (Ahmedova [2], Meutia & Ismail [21]). Common problems faced by SMEs include product quality problems (Izvercian *et al.* [15], Zhao *et al.* [36], Arthur & Yamoah [3]) and productivity barriers (Diao *et al.* [7]). Internal obstacles faced by SMEs such as low quality of human resources in management, organization, mastery of technology, and marketing (Amaliyah & Witiastuti [1]), weak entrepreneurship, and limited access to capital (Bagheri *et al.* [5]), information, technology and markets, as well as other production factors (Demirbag & Tatoglu [6]). External problems faced by SMEs include high transaction costs due to a business climate that is less supportive and the scarcity of raw materials (Garrigos-Simon & Marques [10]). Matters relating to formal legality are still a fundamental problem for SMEs in Indonesia to date, due to the high costs involved in obtaining licensing. Meanwhile, the lack of understanding of cooperatives as a business entity that has an institutional structure (organizational structure, power structure and incentive structure) that is unique compared to other business entities, and lacks public awareness of information about cooperative best practices has caused low quality of institutions and cooperative organizations.

The development of SMEs is directed to provide a significant contribution to the creation of employment opportunities, increasing exports and increasing competitiveness. Meanwhile, micro-scale business development is directed at contributing to the increase in income of low-income people. Empowerment of SMEs is a strategic step in order to increase and strengthen the basic economic life of the community. Hamid & Susilo [12] stated the need for active government involvement and support in the development of SMEs. The technical and operational capabilities of SMEs have become classic issues that are of concern to researchers. Product quality problems are experienced by SMEs in Indonesia, especially in South Sulawesi Province. The low understanding of standardization of SME products is one of the factors in the inability of SMEs to compete with imported products. In general, SMEs products on the market do not yet have standardization. This condition causes the competitiveness of SMEs to be very low, both in the domestic market and the international market. The results of the 2017-2018 survey of The Global Competitiveness Report, the World Economic Forum, said Indonesia was ranked 36th, far behind Singapore, Thailand and Malaysia. This result is a strong indication that the competitiveness of SMEs is a priority problem that requires scientific completion. According to Irijayanti & Azis [13], there are ten main barriers faced by SMEs namely competition barriers, access to working capital, high energy prices, technological barriers, inefficient production costs, macroeconomic factors, low management skills, low product quality, sales restrictions, and limited raw materials. Sule *et al.* [30] explained specifically about the problem of product quality in SMEs in Nigeria as a priority issue compared to other problems. Product quality is an absolute requirement and an important concern in trade. Product quality is one of the determining factors for the realization of market demand continuity so that it can increase output growth. Product quality has a strategic role in improving operational performance, financial performance, and non-financial performance for SMEs (Ulfah & Rahardjo, [32]). Purwanto [25] stated that developing product quality effectively can increase consumer trust and loyalty. This can be an opportunity for SMEs to increase their competitiveness. Irrubai [14] specifically described the development of product quality through implementing labeling and packaging strategies, so that the results of small industries can compete with large companies. The strategic location of South Sulawesi Province has affected the increasing demand for SME products. Wide market opportunities have led to

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increasingly high demands to produce high-quality SME products. The number of SMEs in South Sulawesi reaches 70,000 businesses spread throughout the regencies and cities. This number is relatively lower than in some other regions, such as in the Java region as many as 15,931,889, and the Sumatra region 4,897,457 businesses. There are three main problems that are obstacles to the growth of SMEs, namely (a) an inaccurate SME database, (b) traditional product packaging technology, and (c) the problem of knowledge transfer for craftsmen. Strategic effort that can be carried out in enhancing business competitiveness is improving the quality of their products. Quality management is understood as an effective approach for SME entrepreneurs to face increasingly dynamic business competition. Likewise for consumers who expect high quality products (Yun, [33]). One strategy to improve the quality of SME products is to implement Total Quality Management (TQM) (Wardani *et al.* [34]). Sari and Firdaus [28] explained that the application of TQM can increase the competitive advantage of SMEs. TQM is based on the principles of cooperation and learning, process management, continuous improvement, and focus on increasing customer and employee satisfaction. Thus TQM is a very useful tool, which shows continuous improvement in SME products (Ekiz *et al.* [8]). Zehir *et al.* [35] and Topalović [31] stated that the practice of TQM has a large impact on improving product quality and business innovation. This study aims to identify strategies to increase effective competitiveness for SMEs by implementing total quality management.

2. LITERATURE REVIEW

Total Quality Management (TQM) is a management process with a behavioral or organizational culture approach that is oriented towards continuous quality improvement, customer satisfaction, leader commitment support, cross functional, comprehensive, integrated and scientific method of employee togetherness in problem solving and decision making (Kaynak, [18]). One effort to implement an integrated quality management system can be done by measuring all factors in an organization comprehensively to determine the extent of the quality of the organization. The success of an organization can not be separated from the role of leaders in the organization. Leadership is the main key in management, and plays an important and strategic role in the survival of an organization. The leader is the originator of the goals and that builds organizational commitment. TQM gets great attention from top management, because it can improve performance in the organization. TQM is a new paradigm in running a business that seeks to maximize organizational competitiveness through a focus on customer satisfaction, the involvement of all employees, and continuous improvement in the quality of products, services, people, processes and the organization's environment (Zu *et al.* [37]). Empirical facts in implementing TQM are also recognized as meaningful in creating excellence in organizations throughout the world. Some previous studies have proven that the application of TQM effectively influences employee motivation (Sadikoglu [26]), increases employee satisfaction and decreases interest in changing jobs (Saho & Yadav [27]), reduces costs and improves business performance, managerial performance, and improving the quality of human resources (Ladewski & Al-Bayati [20]). The quality management programs are not only improve product and service quality, consistency, performance, timeliness, strength, but also increase

competitiveness (Kaynak [18]). Quality management practices are broader in eastern countries than in western countries. Teamwork and trust are key elements in the culture that cause these differences. The result is the success of companies in Asia, especially Japan, South Korea, Singapore and Taiwan. Among the two controversial opinions, some researchers were interested in seeing why organizations succeeded in implementing TQM, while others failed to get satisfactory results. In contrast to previous research, Kato & Charoenrat [17] stated that ISO 9000 certification did not show a significant effect on performance. This supports the view that certification does not explain the strength of organizational performance. Zu *et al.* [37] concluded that there was no significant difference in performance quality between organizations that applied the TQM program formally with organizations that adopted the practice of TQM in a non-formal manner. The application of TQM is often associated with organizational performance. Performance measurement, especially organizational performance, is the most important activity for management in managing the organization. In general, performance is defined as the extent to which an operation meets the performance objectives, and the main steps in order to meet customer needs. Facts show that without measurement of performance, it is difficult to fix it. Therefore, improving organizational performance requires identification of the variables that influence it and measuring it accurately. Performance measurement is very important for an organization, so that optimal performance can be achieved (Kunz *et al.* [19]). TQM is a concept that includes efforts to continuously improve quality at all levels of management and all structures contained in the organization (Sadikoglu, [26]). The rationale for the need for TQM is very simple, namely that the best way to compete and excel in global competition is to produce the best quality. To produce the best quality, efforts are needed to continually improve human capabilities, processes, and the environment. The best way to continuously improve the ability of components is to implement TQM (Kaynak, [18]). The concept of TQM has been applied and known to many people. The philosophy of prioritizing the interests of customers has now become known among business people. Integrated quality management refers to the emphasis on quality that covers the organization as a whole starting from suppliers to customers. TQM emphasizes management's commitment to continually getting organizational direction to achieve excellence in all aspects of products and services that are important to customers. This TQM concept requires the commitment of all organizational members to improve all aspects of organizational management. Basically the TQM concept contains three elements (Kunz *et al.* [19]), namely (a) Customer value strategies. Customer value is a benefit that can be obtained by customers for the use of goods / services produced by the company and the sacrifice of customers to obtain it. This strategy is a business plan to provide value to customers, including product characteristics, delivery methods, services, *et cetera.*; (b) Organizational system. Organizational systems focus on providing value to customers. This system includes labor, material, machinery / process technology, methods of operation and work implementation, work process flow, information flow, and decision making; and (c) Continuous quality improvement. Quality improvements are needed to deal with an ever-changing external environment, especially changes in customer tastes.

3. RESEARCH METHODS

This study uses secondary data, namely publication data from the South Sulawesi Central Bureau of Statistics, South Sulawesi Province Cooperative and SMEs Office, and literature studies. The data is a reference and reference to identify strengths, weaknesses, opportunities, and threats. This research is descriptive exploratory research by identifying and developing strategies to improve the competitiveness of SMEs based on scientific analysis and argumentation. SWOT analysis is used to evaluate internal and external factors of SMEs, in order to obtain specific goals through optimizing strengths and opportunities, and minimizing weaknesses and threats. This study also applies the Quality - Selection Grid analysis which will produce a gap analysis by comparing the actual situation with planning. Quality - Selection Grid uses primary data from questionnaires to SME entrepreneurs who have criteria in the form of business age, number of employees, products produced, and investments. This analysis uses several signs (symbols), namely: "+" or "-" or the sign "0". 1. The "+" sign indicates the existence of benefits for SMEs, with the following conditions: a) It is possible to utilize or minimize problems arising from environmental changes b) Weakness of SMEs can be offset by changes in the environment 2. The "-" sign indicates a bad influence on SMEs, with the following conditions: a) Weakness is more dominant than strength b) Weaknesses that are owned can hamper SMEs in overcoming problems related to future threats. 3. Sign "0" if it does not affect SMEs

4. RESEARCH FINDINGS

The results of identification of internal factors (strengths and weaknesses) and external factors (opportunities and threats) of SMEs in implementing TQM are presented in Table 1.

Table 1. TQM Factors Considered in The SWOT Analysis

Internal and External Key Factors	Indicators
Strengths	High growth
	Endurance against economic crisis
	Unique product
	Low overhead costs
	Profitable ratio of capital output
	Simple management structure
Opportunities	Increase in product prices
	High demand for products
	Availability of needed resources
	Banking Support
Environmental	High customer expectations
	Government Support
	Export potential
	Price increase in production inputs
	Lack of raw material
Weaknesses	Low awareness of product quality
	Low utilization of production capacity
	Lack of capital
	Lack of work culture
	Lack of business planning
	No long-term strategic policy
	Lack of infrastructure facilities
	Low attention to research and development
Threats	Imported products
	Competition with large and multinational companies
	Increase in fuel prices
	A political situation that is not conducive

Source: Adopted from Kalpande et al. [16] & Secondary Data

The results of identification of internal and external factors are then analyzed through Quality - Selection Grid as shown in Table 2. The analysis results show that the internal factors (strength) that are considered the most dominant in this study are unique SME products, and the ratio of capital output that benefits SME entrepreneurs. The external factors (weaknesses) that are most often possessed by entrepreneurs are the low implementation of TQM due to the low utilization of production capacity, limited capital, low work culture, and the absence of long-term planning. Alternative strategies for improving the quality of SME products are based on internal and external key factors, including: (a) increasing the use of technology to ensure product quality, (b) implementing standard operating procedures standards, (c) providing training and skills to employees, and (d) diversify products.

5. DISCUSSION

TQM can be a reference in doing business because TQM is a quality improvement strategy that has complete dimensions, so that it will be able to achieve excellence in various aspects. The TQM concept is feasible to apply to all types of organizations, including SMEs. Implementation of TQM is the best step to compete, and enhance excellence in global competition by producing the best quality compared to competitors. To produce the best quality, there is a need for continuous improvement of HR capabilities, processes and the environment.

Table 2. Quality - Selection Grid Results

Strengths	High customer expectations	Government Support	Potential exports	Price increases in input production	Short ages of raw material	Total		
						+	-	0
High growth	+	+	+	-	-	3	2	-
Endurance against economic crisis	+	+	+	-	0	3	1	1
Unique product	+	+	+	+	+	5	-	-
Low overhead costs	-	-	+	0	+	2	2	1
Profitable ratio of capital output	+	-	+	+	-	3	2	-
Simple management structure	-	-	+	-	0	1	3	1
Weaknesses	High customer expectations	Government Support	Potential exports	Price increases in input production	Short ages of raw material	Total		
						+	-	0
Low awareness of product quality	+	0	-	-	+	2	2	1
Low utilization of production capacity	-	-	0	-	-	-	4	1
Lack of capital	-	+	-	-	-	1	4	-
Lack of work culture	-	-	-	+	-	1	4	-
Lack of business planning	+	0	0	+	-	2	1	2
No long-term	-	+	-	-	-	1	4	-

strategic policy								
Lack of infrastructure facilities	-	0	-	0	-	-	3	2
Low attention to research and development	+	-	0	+	-	2	2	1
Total	+	7	5	6	5	3		
	-	7	6	5	7	9		
	0	-	3	3	2	2		

Source: processed research data, 2019

In general, SME businesses that implement effective business strategies can increase their competitive advantage over their competitors. The era of globalization has increased competition among SMEs, both domestically and regionally. Small entrepreneurs are required to look for specific ways or approaches to achieve, improve and maintain a sustainable competitive advantage. The creation of competitive advantage through the development of competitive strategies is an attempt to develop the ability of SMEs to be better than its competitors. Porter [24] argues that entrepreneurs must be able to identify competitors in their industries when formulating competitive advantage strategies. The literature review related to competitive advantage has been agreed that competitive advantage is determined by managerial actions, such as: innovation of the resources produced and the strategic position of the organization. Competitive advantage is also one of the main determinants in the success of SMEs (Novitasari & Zuraida [23]). Mulyana [22] explains that competition is not solely on price and quality, but also on the development of creativity and technology. The exposure of phenomena and empirical studies shows that competitive advantage contributes to the development of SME businesses.

6. CONCLUSION

This research shows that the utilization of production capacity, business capital, and work culture is a priority issue faced by SMEs in South Sulawesi. On external factors, the biggest threat is imported products that have high quality and low prices, competition with large and multinational companies, rising fuel prices, and a non-conducive political situation. The findings of this study explain that the strategy of increasing effective competitiveness for SMEs is (a) increasing the use of technology to ensure product quality, (b) implementing standard operating procedures standards, (c) providing training and skills to employees, and (d) doing product diversification. The overall alternative strategy can help SMEs to improve the quality of their products. Although SMEs in South Sulawesi have a variety of weaknesses, the effectiveness of TQM can be realized through the use of technology, increasing training and employee commitment, oriented to consumers, and having strategic planning to produce continuous improvement.

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