

Influence of Total Quality Management on Competitive Advantage Through MSME Performance: A Case Study of Food and Beverage MSME in Cilacap District

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ABSTRACT

This study seeks to evaluate the impact of Total Quality Management (TQM) on Competitive Advantage via MSME Performance in the MSMEs of Cilacap Regency. The study methodology employs a quantitative approach utilizing a non-probability sampling technique known as purposive sampling. Primary study data was collected via questionnaires from a total sample of 70 MSME owners in the North Cilacap District. The research employs data analysis methodologies, namely descriptive and inferential statistical analyses, utilizing PLS-SEM via SmartPLS 3.0. The study's results concluded that TQM has a significant positive impact on competitive advantage. TQM has a significant positive impact on MSME performance. MSME performance has a significant positive effect on competitive advantage. MSME performance significantly mediates the relationship between TQM and competitive advantage. This study offers implications for MSME stakeholders to effectively adopt the TQM system in their operations to enhance business performance and maintain competitive advantage.

Keyword: Competitive Advantage; MSME Performance; Total Quality Management.

JEL Classification: L1; L15; L26.

INTRODUCTION

The Industrial Revolution 4.0 significantly enhances competitive corporate rivalry. The productivity of MSMEs in Indonesia is deemed challenging to enhance because of their low business performance and productivity, particularly among micro enterprises (Yuwono, Novandari, et al., 2024). The findings of a study survey conducted from 2012 to 2021 demonstrate that the proportion of micro-businesses remains at 98.7 percent, indicating that nearly no micro-businesses advance to a higher tier (Rahmawati et al., 2022). This aligns with contemporary studies on MSME stakeholders in Indonesia, precisely their limited capacity for innovation, inadequate management practices, and constrained resources, which impede operational business performance (Irawan & Ludiya, 2020). Rahardjo et al., (2022) through the results of his research, he stated that the main problem of SMEs is the low performance of SMEs.

Specific criteria influencing MSME performance stem from the owners themselves, particularly demographic factors in business management (Yuwono, et al., 2024). Total Quality Management (TQM) is a methodology that enhances quality (Nugraha, 2022). Quality has emerged as a critical factor in global market rivalry. Micro, Small, and Medium Enterprises can enhance performance via ongoing improvement. Performance is defined as the degree to which an operation achieves its performance objectives and satisfies client requirements (Kumalasari & Haryono, 2019). The current competitive landscape necessitates that MSMEs persist in innovating to enhance the quality of their products and services, hence bridging the productivity gap with larger enterprises (Yuwono et al., 2022). Quality awareness is essential for MSMEs, as it enhances their performance in both financial (Rachmawati, et al., 2022). and non-financial aspects. One strategy to foster quality awareness is the implementation of Total Quality Management (Jaya et al., 2021).

Cilacap Regency itself, which is known as an industrial city, has relatively rapid MSME development (Yuwono, Tajudin, et al., 2024), quoted from data.cilacapkab.go.id shows that as of 2022 there are 20,970 MSMEs in Cilacap which are divided into 18,758 micro businesses, 2,167 small businesses and 45 medium businesses. From the available data, it is known that almost 50% of these MSMEs are in the culinary industry category. The data also shows that the scale of medium businesses is still tiny compared to the total number of MSMEs. This is in line with the research stated above that there are still few micro businesses that are able to move up to a larger business scale (Yuwono, Rachmawati, et al., 2023). The accelerating pace of globalization necessitates that Large Enterprises and SMEs implement Total Quality Management to enhance their performance in a progressively competitive market (Faritsy & Suseno, 2014). Research evaluates TQM as a model for business excellence and enhances SME performance (Lestari et al. 2019). The study's results demonstrate that TQM significantly enhances SME performance. In light of the context above, the author seeks to delineate the research problem under the heading *The Effect of TQM on Competitive Advantage Through SME Performance: Case Study of Food and Beverage SMEs in Cilacap Regency*.

LITERATURE REVIEW

Total Quality Management

Total Quality Management (TQM) serves as a framework for enhancing sustainable business practices through an effective organizational management system that addresses customer demands and fosters consumer trust in the products and services

offered by business proprietors, ultimately leading to customer satisfaction (Dhamayantie & Fauzan, 2017). Total Quality Management (TQM) is an exemplary quality management system that optimizes business operations, enhances competitive capability, influences product development through continuous improvement, delivers quality services, and engages employees with significant potential (Perdana et al., 2023). The Resource-Based View (RBV) theory concerning the Total Quality Management (TQM) system significantly enhances product and service quality and can positively influence business performance augmentation. TQM comprises ten measurement factors that serve as indicators for attaining business success: consumer focus, continuous process improvement, quality obsession, teamwork, employee participation and empowerment, scientific methodology, education and job training, long-term commitment, goal alignment, and autonomy (Ekayani et al., 2021).

Competitive Advantage

Competitive advantage is characterized as a company's capacity to endure competition by delivering lesser value while offering more significant benefits (Nizam et al., 2020). It is a crucial element in executing business competition, implemented through numerous tactics employed by a company to maintain robust competitiveness and perpetually enhance the business system (Violinda, 2018).

MSME Performance

Every business has goals that must be achieved with effective strategies (Yuwono, Wulansari, et al., 2023). The primary objective of a firm is to enhance performance to get optimal results (Rachmawati, Yogawati, et al., 2022). Business performance results from the attainment of corporate objectives through practical and pragmatic tactics (Milenia Ariyati et al., 2022). The performance of a company is a crucial determinant of the success of MSMEs in a nation, influenced mainly by possessing optimal attributes in the evaluation criteria deemed efficient and effective for MSMEs. Specific characteristics influencing MSME performance stem from the owner, particularly demographic factors in business management (Rosyidah et al., 2022). The performance of MSMEs can be assessed by various metric, namely: 1) Sales growth 2) Capital growth 3) Labor growth 4) Customer and market share growth 5) Profit growth.

METHODS

This study constitutes a form of quantitative research. The independent variable (X) in this research is Total Quality Management (TQM). The dependent variable (Y) in this study is a competitive advantage, while the mediating variable is MSME performance. This research targets MSME participants in Cilacap, utilizing a sample drawn from this group, specifically concentrating on the Central Cilacap District, comprising 70 respondents. The sample criteria for this study comprise MSMEs operating within the food and beverage sector. The tool employed in this study was a questionnaire. A questionnaire is a compilation of inquiries utilized by researchers to gather fundamental information from self-reports regarding the subject's knowledge, beliefs, or the material under investigation. The questionnaire employed in this study is closed, restricting respondents to a limited set of possibilities or a single response.

This research employs an associative analysis of causal linkages. This study concerns the existence of a causal relationship among many factors, including

independent and dependent variables (Nasir & Sukmawati, 2023). This research method is quantitative, employing measurements, observations, calculations, and numerical and statistical data throughout the study process. This research additionally employs original data acquired directly from MSME owners. The data is subsequently analyzed to evaluate the hypothesis concerning the employed variables via statistical methods. In this study, researchers employ a Likert scale ranging from 1 to 5 to quantify responses to these variables (Sumartini et al., 2020). The data gathering method involves a field survey with a closed questionnaire and interviews. The questionnaire has multiple inquiries that will be disseminated to MSME proprietors in the North Cilacap District. The interview content for this study is derived from TQM indicators, including consumer focus, continuous process improvement, quality obsession, teamwork, employee participation and empowerment, scientific methodology, job education and training, long-term commitment, goal alignment, and autonomy in control (Muttaqin & Dharmayanti, 2015). This study will employ descriptive analysis and inferential statistical analysis, utilizing PLS-SEM on Smart PLS 3.0 software. PLS-SEM is a multivariate data analysis method commonly employed to investigate and validate grounded linear and additive correlations (Purwanto et al., 2021). The partial least squares structural equation modeling (SEM-PLS) data analysis method was employed utilizing SmartPLS version 4.0 software. In this study, the researcher utilized multiple upstream research references to construct the following research framework:

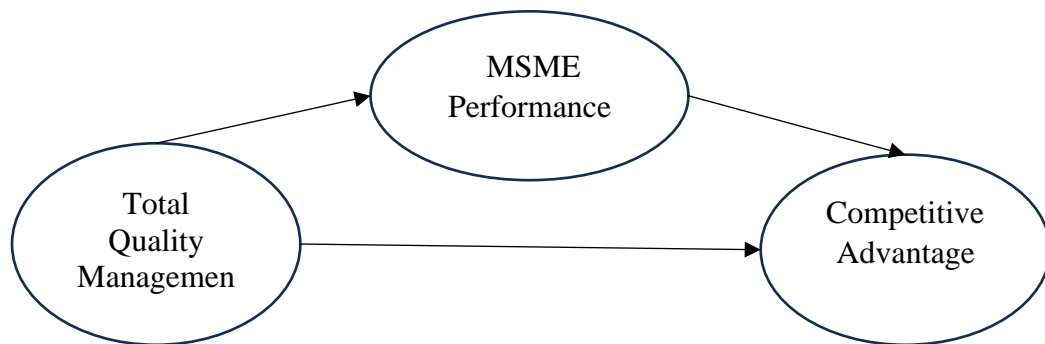


Figure 1. Research Framework

RESULT AND DISCUSSION

Data Analysis Test

The data analysis tests used include Validity and Reliability Tests, classical assumption tests consisting of Normality Tests, Multicollinearity Tests, and multiple linear regression tests to determine the effect of TQM on MSME performance and competitive advantage in MSMEs in Cilacap and the effect of MSME performance on competitive advantage. The T-test and F Test are used to answer the hypothesis.

Table 1. Respondent Characteristics Based on Gender

Gender	Frequently	Presentase
Man	28	40,0%
Female	42	60,0 %
Total	70	100%

Based on Table 1, it is known that the distribution results in this study are that the respondents are male, with a total of 28 people (40%). While the remaining respondents are female, totaling 42 people (60%).

Table 2. Respondent Characteristics Based on Age

Age	Frequently	Presentase
21 – 30 year	26	37,16%
31 – 40 year	21	30,00%
41 – 50 year	15	21,42%
> 50 year	8	11,42%
Total	70	100%

Table 2 shows the distribution in this study by respondents aged 21-30, as many as 26 people (37,16%); respondents aged 31-40, as many as 21 people (30%); respondents aged 41-50, as many as 15 people (21,42%), and the remaining respondents aged > 50, as many as eight people (11,42%).

The correlation of items that are corrected positively tested and is more significant than the Rtable value at a significance level of 5% of 0.2352. So, it can be concluded that all items of the TQM, MSME Performance, and Competitive Advantage are valid and suitable for use because of $R_{COUNT} > R_{Table}$. So, the instruments used are feasible for further analysis.

When conducting a reliability test, there are criteria for measuring or evaluating reliability, namely by looking at the value of Cronbach's Alpha. The results of the reliability test by looking at Cronbach's Alpha and Composite Reliability values were obtained in Table 3:

Table 3. Cronbach's alpha

Variable	Cronbach's Alpha	Note
Total Quality Management	0.647	Reliable
Performance MSME	0.717	Reliable
Competitive Advantage	0.620	Reliable

Table 3 shows that all variables have a Cronbach's Alpha value > 0.6 . This shows that all variables in the estimated model meet the criteria of (reliable). Based on the results of Normality data processing, ASYMP is known. Sig. The value (2-tailed) 0.200 is more significant than 0.05, so it can be concluded that the regression model in this study is normally distributed. The results of multicollinearity data processing show that all independent variables have a tolerance value above 0.1 and the VIF value is below 10, so it can be concluded that the regression model in this study does not experience multicollinearity. The results of multiple linear regression tests, tested by SPSS, obtained the coefficient of regression coefficient $\alpha = 19.254$, $\beta_1 = 0.11$, and $\beta_2 = 0.117$, so that the linear regression equation produced is:

$$Y = 19.254 + 0.11X_1 + 0.117X_2 \quad (1)$$

The value of $\alpha = 19.254$ shows that if the TQM value and MSME performance are equal to zero, then the amount of competitive advantage is equal to 19,254. Every time there is an increase in TQM by one percent, TQM also increases by 0.11. Likewise, if there is an increase in MSME performance value by one percent, then competitive advantage also increases by 0.117. The results of the hypothesis test show that TQM affects competitive advantage because the number T Table (0.823 > 0.279) has a significance value of 0.05. Meanwhile, MSME's performance also affects competitive advantage because TCount > TTable (1,537 > 0.279) has a significance value of 0.05. TQM and MSME performance influence competitive advantage because FCount > FTable (1,159 > 1,077) has a significance value of 0.05. The adjustable quasi-R value is 0.047 (47%). This means that the total quality management (TQM) (X1) and MSME performance (X2) contribute to a competitive advantage (Y) of 0.047 or 47%, and the remaining 0.053 or 53% is influenced by other factors that are not studied.

CONCLUSION

Based on the findings of the study, it is evident that TQM significantly affects the interest of purchase (Y), thereby influencing the competitive advantage of MSMEs in the Cilacap District. The TCount value of 0.823, more significant than the TTable value of 0.279, supports this conclusion. Additionally, the performance of MSMEs also positively impacts competitive advantage, as indicated by the TCount value of 1.537, exceeding the T-Table value of 0.279. These results affirm that both TQM and MSM performance are critical determinants of competitive advantage in the Cilacap MSME sector.

Several research limitations must be acknowledged. Firstly, the study is geographically limited to the Cilacap District, which might restrict the generalizability of the results to other regions. Secondly, the research employs quantitative methods, potentially overlooking qualitative nuances that could provide deeper insights into the dynamics of TQM and MSM performance. Future studies should consider a mixed-methods approach for a more comprehensive analysis.

The study's findings have important managerial implications. MSME owners and managers in the Cilacap District should focus on enhancing TQM practices to boost purchase interest and competitive advantage. Likewise, improving MSM performance can further strengthen their market position. Policymakers should support MSMEs in adopting effective TQM and performance improvement strategies, thereby fostering a more competitive business environment in the region.

Future research should expand beyond the Cilacap District to include other areas, allowing for broader applicability of the findings. Incorporating qualitative research methods can also provide a more nuanced understanding of how TQM and MSM performance influence competitive advantage. Additionally, exploring other factors, such as innovation and marketing strategies, could yield valuable insights into enhancing the competitive advantage of MSMEs.

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