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BUILDING COMPETITIVE ADVANTAGE THROUGH IMPLEMENTING TOTAL QUALITY MANAGEMENT IN FAST-MOVING CONSUMER GOODS MANUFACTURING COMPANIES IN INDONESIA

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Abstract

*Business competition today is very tight and unavoidable. One industrial sector that is not immune from business competition is the consumer products industry which produces daily necessities. The consumer products industry has a fast product turnover in the market. This kind of industry is grouped into the Fast-Moving Consumer Goods (FMCG) industry. The research objective is how to build competitive advantage through the implementation of total quality management in fast moving consumer goods manufacturing companies in Indonesia..The samples from this research are managerial personnel with supervisory positions, or managers of manufacturing companies in the FMCG industry in Indonesia. Determining the sample uses nonprobability sampling with purposive sampling criteria where the researcher provides limits for the sample (Sugiyono, 2016).The minimum sample is 5-10 times the number of indicators, this research uses 23 indicators (23 indicators x 7 = 161 samples).The analysis tool uses AMOS 22.00 Structural method Equations Modelling. Research findings show that there is a significant positive influence of TQM implementation with dimensions of focus on leadership, strategic planning, and customer focus on product quality with a p-value marked *** approaching zero < 0.05 (H1 is accepted). There is.influence.significant implementation of TQM with dimensions of focus on leadership, strategic planning, and customer focus towards competitive advantage with.mark.p-value.as big as.0.001 (H2 accepted). There is.influence.product quality has a significant impact on competitive advantage with.p-value of.0.041 (H3 accepted). From direct effect and induced testsIt is known that the direct effect of TQM on competitive advantage is 0.331 and the indirect effect of TQM implementation oncompetitive advantagethrough product quality (mediation variable) of 0.462, meaning the mediation was successful. Product quality is able to mediate between TQM implementation and competitive advantage.*

Keywords: *TQM Implementation, Product Quality, Competitive Advantage.*

INTRODUCTION

The global economy is currently in very rapid development. Many new companies are emerging, growing and expanding to penetrate regional areas and global markets. Naturally, rapid economic development will give rise to competition between companies, both between domestic companies and business competition in the international realm. Companies compete with each other to gain the trust and attention of consumers around the world. The winner of the competition is a company that is at the forefront of innovation and can provide satisfaction to customers (Porter 1980).

The increasing risks in the global market should be a serious concern for policy makers in companies. In the report presented byHallon the World Economic Forum 2020 online page, it is stated that in the short term the world will face an increase in the risk of economic competition by 78.5% (Hall 2020).

Indonesia in the eyes of the world is a country that is still lacking in the competitiveness index. At the 2019 World Economic Forum (WEF) in Davos,

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Switzerland,Scwabrevealed that Indonesia is ranked 50th in the world in the 2019 Global Competitiveness Index, and ranks fourth in the ASEAN region behind Singapore (1), Malaysia (27), and Thailand (40). Indonesia's 2019 Global Competitiveness Index ranking decreased 5 levels from the previous year. The cause of Indonesia's declining ranking is stagnant or even declining product quality and limited growth in product innovation (Scwab, 2019). This makes Indonesia's competitiveness growth ability slow compared to other countries in the ASEAN region. Indonesia still has broad hopes because it has main potential, namely its market size, demographic advantages, and having an abundant workforce (Scwab, 2019).

One industrial sector that is not immune to competition is the consumer products industry which produces daily necessities. The consumer products industry has a fast product turnover in the market. This kind of industry is grouped into the Fast-Moving Consumer Goods (FMCG) industry. (Pongiannan and Chinnasamy 2014). The grouping of industries included in FMCG are industries that produce the food industry, both processed food and food ingredients, and beverages (food and beverage), cosmetics, pharmaceuticals, personal care goods, cleaning and sanitation (toiletries), and other products that used to meet consumers' daily needs (Dirisu et al., 2013). According to the Central AgencyStatisticsIndonesia, large and medium manufacturing industries from the main categories of FMCG industry, namely the food, beverage, chemicals and chemical goods industry, and pharmaceuticals, chemical medicinal products and traditional medicines (Statistics, 2019).

According to the results of the industrial development analysis prepared by the MinistryIndonesian industry in the 2019 report, growth in household consumption figures increased in 2018 from the previous year. However, this high growth in household needs was not followed by growth in the food, beverage, cosmetics and pharmaceutical industries. Industrial companies that produce consumer goods experienced slower growth in 2018 compared to the growth value of the consumer goods industry in 2016 and 2017 (Ministry of Industry, 2019).

Reporting from Indonesian Business Magazine on Monday, November 26 2018,womenwrote, domestic food and beverage producers must be able to increase their competitiveness to be able to compete with imported products. The number of product imports into Indonesia until October 2018 still shows a statistical increase, outperforming goods produced domestically. This situation can increase the risk of low food security and the need for domestic consumer goods (Annisa 2018).

FMCG companies can strive to increase market attention by fulfilling quality according to customer expectations which can significantly influence customer purchasing decisions. The way to attract customer attention is by prioritizing the focus on satisfying customer needs for quality goods. Companies must be able to create quality products to get good ratings from customers (Ghosh 2013).

Product quality is the level of fulfillment of customer expectations achieved by the company's ability to make and provide a product (Maleti and Maleti 2012). Product quality

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is one of the factors that really determines a company's superiority in the world of business competition. To be able to excel from competitors and win competition in the market, companies need to pay attention to the quality of the products they make. Good product quality and constant improvement from time to time is an added value for a manufacturing company to be able to outperform its competitors (Laura. S er al., 2017).

In research conducted byPrajogo & Sohal, (2006)found that the company's differentiation strategy influences TQM implementation in a significantly positive way. Furthermore, the implementation of TQM affects product quality and product innovationand process innovation, but not yetdiscusses competitive advantage variables as a further impact of product quality, product innovationand process innovation (Prajogo & Sohal, 2006).

The significant positive influence of TQM implementation on product quality has also been proven byMehra (2001). The work of improving and ensuring quality is not just the responsibility of certain personnel or just one department in the company, but everyone in the company organization is required to have a quality culture in carrying out their duties. This research recommends conducting further research regarding the implementation of TQM with the dimensions of the company's internal resources to see the value of the effectiveness of TQM implementation on other factors.

Pradhan's research in 2017 found that the success of a company organization depends on management strategies in increasing competitiveness. Companies can identify TQM as a company strength and benefit from implementing TQM. Leadership, strategic planning, and customer focus are several items in the TQM construct that can be implemented to increase a company's competitiveness (Pradhan 2017).

Evidence states that research on the influence of TQM implementation on competitive advantage has been widely carried out, however the specific problem of the influence of TQM implementation in the dimensions of leadership, strategic planning and customer focus on competitive advantage using product quality mediator variables on FMCG manufacturing companies in Indonesia has not been researched.

The problem underlying this research is that FMCG manufacturing companies in Indonesia are considered to have a low level of competitive advantage (Annisa, 2018). To increase competitive advantage, efforts are needed, including implementing TQM according to Pradhan (2017) and continuously improving product quality according to Prajogo & Sohal (2006). Researchers see the need to conduct research on building competitive advantage through the implementation of TQM and product quality as the mediator variable. The TQM implementation that will be explored includes the dimensions of leadership, strategic planning, and customer focus.

The general aim of this research is to determine the effect of TQM implementation in companies on competitive advantage mediated by product quality variables in FMCG manufacturing companies in Indonesia.

The specific objectives of this research are:

1. To determine the positive influence of TQM implementation variables in the dimensions of leadership, strategic planning and customer focus on product quality.

2. To determine the influence of TQM implementation variables in the dimensions of leadership, strategic planning and customer focus on competitive advantage.
3. To determine the effect of product quality on competitive advantage.

LITERATURE REVIEW

Resource-Based View Theory (RBV)

Resource-Based View Theoryis a theory which holds that a company's competitive advantage is determined primarily by the impact of managing the company's internal resources (Wang, 2014). The dimensional factors of leadership, strategic planning, and customer focus are resources that come from within the company. So this research focuses on the Resource-Based View Theory (Wang 2014).The theory of the company's resource-based competitive advantage (RBV) view looks at the company's internal environment as a driver for competitive advantage and empowers the resources that the company has developed to compete in the industrial environment. (Wang, 2014).

The RBV theory developed based on a focus on the company's internal resource strategy which refers to empowering strengths from within the company (Pigatto et al., 2019). The practice of developing corporate strategy focuses on the company's internal factors in achieving superior and long-lasting performance relative to companies in the same industry (Dirisu, Iyiola, and Ibidunni 2013). In RBV theory, a company is viewed as a collection of assets or resources that are semi-permanently tied to the company's organization. Focusing attention on all corporate assets, capabilities, organizational processes, corporate attributes, information, and knowledge controlled by the company enables increased efficiency and effectiveness in implementing corporate strategy. The strategy of creating value from the company's uniqueness that is not the same as competitors will become a strength in competitive advantage(Wang 2014).

Competitive Advantage

Competitive advantage in theory is a set of strategies pursued and implemented by a company to overcome business factors compared to competitors (Wen-Cheng et al., 2011). Competitive advantage exists when a company is able to provide the same benefits as competitors but at lower costs (cost advantage), or provides benefits that exceed the benefits of competitors' products (differentiation advantage). (Wen-Cheng, Chien-Hung, and Ying-Chien 2011).

Competitive advantage is achieved when a company acquires and/or develops a factor or combination of several factors that allows the company to outperform its competitors. These factors include access to sources of high quality raw materials at low prices, access to highly trained and skilled human resources (Wen-Cheng, Chien-Hung, and Ying-Chien 2011).

A company's competitive advantage is created by each company's competitive strategy. This company strategy determines what the company will do and how to do it (Porter 1987).

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Product quality

The definition of product quality is the fulfillment of customer expectations by products made and presented by producers, in terms of usefulness, safety and comfort. (Maleti and Maleti 2012). The ability to offer products and services at relatively low costs, free from defects, and the resulting products are able to meet every specification parameter of customer needs must be achieved to build product quality (Alomian et al., 2019).

Product quality is a very vital factor in a company because it determines the ability to penetrate the company and the company's strategy. Quality is also used as a differentiation strategy by some of the world's leading companies (Singh 2013).

Product quality will mediate the relationship between TQM implementation and organizational performance, one of the variables of which is competitive advantage (Prajogo and Sohal 2001).

Total Quality Management (TQM)

TQM is a general management philosophy that seeks to increase a company's competitive advantage and is a way of managing a company to improve its overall effectiveness and performance to achieve excellence in competition. (Al-Qudah 2012). Fulfillment of customer perceptions of the characteristics of the products made and delivered by the company is referred to as product quality(Maleti and Maleti 2012). Product quality is often expressed as the percentage of defective production to the total production volume.

Three measures that can be used to prove that TQM implementation has a positive and significant influence regarding differentiation strategy, namely product quality, product innovation,and process innovation (Prajogo and Sohal 2006).

Leadership, strategic planning, and customer focus are part of the soft factors for implementing TQM in companies. This factor is included in the critical factors determining the success of TQM implementation (Calvo-Mora et al. 2014). According to research conducted byMaleti and Maleti (2012) Effective and efficient implementation of quality management in TQM can affect productivity and product quality. The success of TQM implementation is not centered on costs but on the contribution of each personnel to the implementation of TQM. There are three dimensions in TQM measurement as follows.

Leadership in TQM Implementation

Leadership is necessary to achieve competitive advantage by increasing customer satisfaction, reducing costs resulting from poor quality (Al-Qudah 2012).

The leadership style put forward byVargas (2015)in the form of transactional or transformational leadership or a mixture of both can spur innovation, high performance and competitiveness. Good leadership is capable of facilitating organizational learning simultaneously as proposed byVargas (2015).

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Strategic Planning in TQM Implementation

Strategic planning is often considered an operational milestone carried out by a company. Business companies aim to realize their strategic plans with the implementation of TQM. It is necessary to look at the general characteristics of strategic planning in the implementation of TQM. TQM implementation has been adopted and implemented by a large number of companies throughout the world. In strategic planning there is a clear mission and objectives set. Strategic planning is a plan and TQM is a way of working with established principles. Strategic planning refers to action, requires absolute commitment from top management, participation from all employees, demands cultural change and focuses on customers(Kantardjieva 2015).

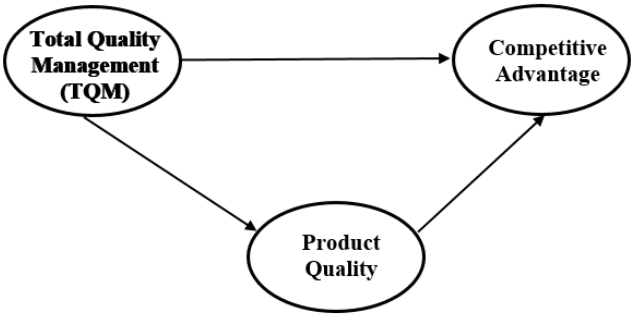
Focus on Customers in TQM Implementation

On researchTeh and Yong (2012) Expressing a focused relationship with customers is expressed by the efforts made by the company to produce products and provide services that meet customer needs. Fulfilling customer needs is the key to successful TQM implementation because the final result that is assessed and used as a reference is how we can satisfy customer needs with different characteristics and with varying needs. (Hakimi et al., 2018).

Framework of Thought

The framework of thought formed with several references to previous research journals that link research variables is presented in the image below:

Figure 1. Framework of Thought



Source: (Bon and Mustafa 2013; NIST 2019; Peng and Prybutok 2015; Peng, Prybutok, and Xie 2019; Prajogo and Sohal 2001, 2006; Talib and Rahman 2012; Thai, Igel, and Laosirihongthong 2010)

Research hypothesis:

H1: There is a significant influence of TQM implementation with the dimensions of focus on leadership, strategic planning, and customer focus on product quality.

H2: There is a significant influence of TQM implementation with dimensions of focus on leadership, strategic planning, and customer focus on competitive advantage.

H3: There is a significant influence of product quality on competitive advantage.

METHOD

Data Type

This research is a quantitative type using a questionnaire distributed to respondents as representatives of the sample of companies targeted in this research. This research uses primary data from questionnaires that have been distributed. It is hoped that through this research, the relationship between these variables can be known and conclusions can be drawn regarding how the relationship between variables influence each other (Ferdinand 2014).

Data source

The data source in this research uses primary data by collecting directly or indirectly, online from respondents who represent the sampling target. Data collection was carried out using a tool in the form of a questionnaire containing statements and directions for respondents to answer. The use of questionnaires in this research is primary data that will be analyzed in this research. The questionnaire distributed contains statements and directions proposed by the researcher and filled in by the respondent.

The use of this questionnaire is to determine the relationship between competitive advantage variables, product quality and TQM implementation in the dimensions of leadership, strategic planning, customer focus (Ferdinand 2014).

Population

The population in this study includes FMCG companies in Indonesia which produce, for example, the food industry, both processed food and food ingredients, and beverages (food and beverages), cosmetics, pharmaceuticals, personal care goods, cleaning and sanitation (toiletries), and other products used to meet consumers' daily needs. According to data from the Indonesian Ministry of Industry, 7,170 FMCG companies were registered with the ministry in 2015 (Ministry of Industry, 2019). Including large and medium manufacturing industries from the main group of FMCG industries, namely the food, beverage, chemicals and chemical goods industry, and pharmaceuticals, chemical medicinal products and traditional medicines with a total of 9,222 companies in 2018 included in the research population (Statistics, 2019).

Sample

Samples are members of the population to be studied. This research uses a probability sampling method where the sample must be able to represent the population and meet certain criteria. Probability sampling is a sampling technique in which all members of the population have the same chance of being selected for the sample (Uprichard 2013). Sampling used the stratified random sampling method by dividing the existing population into several groups

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according to classification criteria determined based on relevance to the study objectives. The criteria used to use samples in this research are:

a. It is a medium to large manufacturing industrial company that has more than 20 employees (Statistics, 2019).
b. It is an FMCG industry which is included in the main category of food, food, beverage, cigarette, chemicals and chemical goods, cosmetics, pharmaceutical health equipment, chemical medicinal products and traditional medicine industries. (BPS 2015).
c. Companies whose addresses are in the territory of the Unitary State of the Republic of Indonesia.

The respondents used for this research were managerial personnel, namely at the supervisory level, junior managers, senior managers, directors and company owners who had worked for no less than 1 (one) year at the last company, with the hope that the respondents would understand the condition of the company.

The minimum sample is 5-10 times the number of indicators in this research, this research uses 23 indicators (23 x 7 = 161). The appropriate sample size for SEM is 100-200 respondents (Hair, 1995). Furthermore, Ghozali (2013) also explained that when using maximum likelihood (ML) in determining the estimation model, the sample size is recommended to be between 100 and 200 respondents. So the sample in this study was 161 respondents, namely managerial personnel of manufacturing companies in the FMCG industry in Indonesia..

RESULTS AND DISCUSSION

Identity of Research Respondents

The entire sample in the study was 161 data processed. Respondents have an important role in research as a source of accurate information in answering each question asked. Sample identity vizrespondent's gender, age, level of education, length of service, number of employees at work, company's main product and position at work. Explained as follows.

Table 1. Respondent Identity

No	Gender	Number of Respondents	Percentage
1	Man	77	48%
2	Woman	84	52%
Total		**161**	**100.00**
No	**Age**	**Number of Respondents**	**Percentage (%)**
1	20-25 years	2	1%
2	26-30 years old	83	52%
3	31-35 years old	67	42%
4	>36 years	9	5.59%
Total		**161**	**100.00**

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No	Level of education	Number of Respondents	Percentage (%)
1	Diploma (D3)	7	4.30%
2	Postgraduate (Strata II)	7	4.30%
3	Bachelor's degree)	147	91.30%
Total		**161**	100
No	**Length of work**	**Number of Respondents**	**Percentage (%)**
1	2-5 Years	47	29.19%
2	6-10 Years	82	50.93%
3	11-15 Years	24	14,900%
4	>16 Years	6	4.96%
Total		**161**	**100.00**
No	**Number of Employees at Work**	**Number of Respondents**	**Percentage (%)**
1	20-199 people	2	1.20%
2	200-1000 people	15	9.30%
3	>1000	144	89.40%
Total		**161**	**100%**
No	**Main Products Produced by the Company**	**Number of Respondents**	**Percentage (%)**
1	Medical devices	1	0.6%
2	Chemical material	1	0.6%
3	Food material	35	21.7%
4	Packaging	1	0.6%
5	Cosmetics	6	3.7%
6	Food	98	60.9%
7	Drug	18	11.2%
8	Perfume	1	0.6%
Total		**161**	**100%**
No	**Position in the Workplace**	**Number of Respondents**	**Percentage (%)**
1	Manager	24	14.90%
2	Supervisors	136	84.47%
3	assistant manager	1	0.6%
Total		**161**	**100%**

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Full Model Goodness of Fit Test

In the image below, the full feasibility test of the research model is presented. Analysis using AMOS 22, with the SEM method, along with the results of the analysis are presented below.

Figure 2 Full Research Model Test

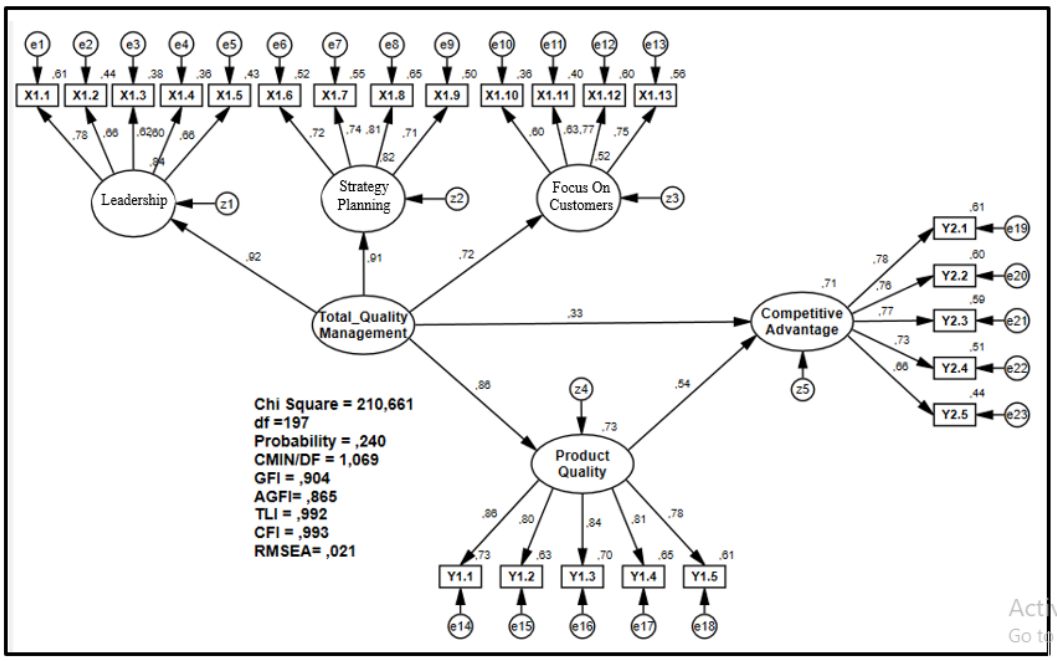

Table 2. Full Model Feasibility Test Analysis Output

Goodness of fit index	*Cut off value*	*Analysis Results*	*Information*
Chi-Square	< 109.773 (df:197, α:0.05)	210,661	*Fit*
CMIN/DF	< 2.00	1,069	*Fit*
Probability	> 0.05	0.240	*Fit*
GFI	> 0.90	0.904	*Fit*
AGFI	> 0.90	0.865	*Marginal*
TLI	> 0.90	0.992	*Fit*
CFI	> 0.95	0.993	*Fit*
RMSEA	< 0.08	0.021	*Fit*

In table 2 above, the feasibility test is fullPmodelPAlreadyPmeet standard criteriaPgoodnessPofPfitPdetermined to be good. There is only one criterion that does not meet the standard goodness of fit criteria for the AGFI test with a value of 0.865 < 0.90. Because the dominant criteria have been met, it can be tolerated and the next analysis can be continued. The following are the results of the regression weight test to determine the influence between research variables.

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Table 3. Regression Weight Full Model

Relationship Between Variables			Estimate	S. E	CR	P-Values
Total Quality Management	→	Product quality	0.483	0.046	10,548	***
Product quality	→	Competitive_Advantages	0.500	0.153	3,274	0.001
Total Quality Management	→	Competitive_Advantages	0.173	0.085	2,041	0.041

Table 3 above will be analyzed below:

1. The Effect of Implementing Total Quality Management (TQM) onProduct quality shows a CR value of 10.54 with a p-value marked ***, which means the value is close to zero < 0.05. This means that there is a significant influence of the Implementation of Total Quality Management (TQM) on product quality.
2. The Effect of Implementing Total Quality Management (TQM) onCompetitive advantage shows a CR value of 2.041 with a p-value of 0.041<0.05. This means that there is a significant influence of the Implementation of Total Quality Management (TQM) on competitive advantage.
3. The influence of product quality on Competitive advantage shows a CR value of 3.274 with a p-value of 0.001<0.05. This means that there is a significant influence of product quality implementation on competitive advantage.

Evaluation of Structural Model Assumptions

Below we will test the SEM assumptions, namely data normality, evaluation of outliers and data multicollinearity test. Below we will present each of the three tests.

Data Normality Test

Testing the normality of the data by paying attention to the output assessment of normality on the multivariate value of the critical ratio (cr) row, it is known that the value of 2.493 is in the range of ± 2.58, meaning the data is normal.

Evaluation of Outliers

According to Ghozali (2014), the data outliers test is where there are extreme values in a group. To detect whether there is outlier data or not, you can pay attention to the valuesMahalanobis distance from AMOS results. It is known that with the 16 observations displayed which are close to the threshold value (cut of value), the largest value in the Mahalanobis d-squared is 38.069 < 49.728 (cut of value), meaning that the research data is free of multivariate outliers.

Multicollinearity Evaluation Test

Multicollinearity test on the data to detect the level of correlation in the independent variables. If there is a very small determinant value or mines (-) then it can be interpreted as multicollinearity (Ghozali, 2014). It is known that the output of the multicollinearity test by paying attention to the DSC value is =(0,000000000000010806) this value is considered to

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be still far from the mines value (-) so it is concluded that there is no indication of multicollinearity in the research data.

Discussion of the results of this research by paying attention to the hypothesis conclusions in table 4.21. Findings of research conductedIt is proven that there is a significant influence betweenimplementation of TQM with indicators focused on leadership, strategic planning, and customer focus on product qualityThese results are supported by previous research from (Hassan et al. 2012) AndPrajogo & Sohal, (2006) (H1 Accepted). Furthermore, in accordance with (H2 Accepted) it is proven that there is a significant influenceTQM implementation with indicators focused on leadership, strategic planning, and customer focus on competitive advantagesupported by research conducted(Korankye 2013)And (Rashid et al. 2020).In accordance with (H3 Accepted), it is proven that there is a significant influence between product quality and competitive advantage, supported by research (Alomian, Alsawalhah, and Almarshad 2019), (Hoe and Mansori 2018) And (Flynn, Schroeder, and Sakakibara 1995).Each hypothesis will be discussed as follows.

The Effect of Implementing Total Quality Management (TQM) on Product quality.

Implementation of TQM with indicators focused on leadership, strategic planning and customer focus has a positive influence on product quality. The company's internal strengths which include leadership, strategic planning, and customer focus can positively improve the quality of the products produced by the company. The application of TQM in companies leads to high product quality control and leads to high quality performance. The implementation of TQM which produces better product quality is the company's strength to be able to survive in the industrial competitive environment. Improvements in product quality at the company are carried out continuously using the implementation of TQM (Brah, Tee, and Rao 2002).

The loading factor (estimate) value of the TQM indicator on the leadership dimension which has the highest value is trust of 0.782 and the one which has the lowest value is the unity of purpose indicator of 0.602. Of the indicators that have the highest value is trust which in the implementation of TQM the leadership in the company has a good level of trust so it needs to be maintained by every leader and the indicator of unity of purpose which has a low value from the implementation of TQM in the leadership dimension needs to be re-managed, to equalize every perception of all employees on the vision and mission of manufacturing companies in the FMCG industry in Indonesia.

The loading factor (estimate) value of the TQM indicator on the strategic planning dimension that has the highest value is leadership commitment of 0.808 and the one that has the lowest value is the strategic socialization indicator of 0.709. Of the indicators that have the highest value is the leadership's commitment, which in the implementation of TQM in the company's strategic planning is strongly supported by good leadership in the strategies set by the company to achieve the planned vision, mission and strategy socialization indicators. The low value of implementing TQM in strategic planning means that there is a

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need to increase the socialization of each plan that will be achieved by the company to all employees who work in manufacturing companies in the FMCG industry in Indonesia.

The loading factor (estimate) value of the TQM indicator on the customer focus dimension which has the highest value is complaint handling of 0.773 and which has the lowest value is the customer relations indicator of 0.599. Of the indicators that have the highest value is complaint handling, which in the implementation of TQM focuses on customers, meaning that the company has responded to every complaint made by consumers both related to the products produced by the company and related to the company itself and the customer relationship indicator has value. The low level of TQM implementation on customer focus means that the company's customer relationship management needs to be improved again because this strategy is to increase revenue and profits, reduce expenses and increase customer loyalty to the products marketed by the company.

The Effect of Implementing Total Quality Management (TQM) on Competitive Advantage.

Implementation of TQM with indicators focused on leadership, strategic planning and customer focus has a positive influence on competitive advantage. The company's internal strengths which include leadership, strategic planning, and customer focus can positively increase the company's competitive advantage. In implementing TQM in a company with a training program that is properly planned is a very important factor in establishing competitive advantage. Strategic planning has an important role in implementing integrated TQM in company operations (Oschman 2017). TQM on competitive advantage has found several studies showing that TQM can produce competitive advantages based on cost or sustainable differentiation. TQM achieves competitive advantage as evidenced by superior financial performance, increased customer satisfaction, faster response to competitors(el Shenawy, Baker, and Lemak 2007).

The loading factor (estimated) values for indicators of competitive advantage are Price of 0.782, Quality of 0.763, Differentiation of 0.766, Pioneer of 0.728, Availability of 0.664. Of the five indicators of competitive advantage, the highest value is price, which means that manufacturing companies, especially the FMCG industry in Indonesia, have an advantage over competitors that is obtained by delivering greater customer value, through lower costs or by providing more benefits in accordance with the determination. higher price. The lowest indicator is availability where companies need to manage well the availability of raw materials owned by the company. Some common causes of running out of stock include being late in anticipating demand for a product and a slow order fulfillment process. If the company has inadequate stock availability, it will lose profits and consumers.

The Influence of Product Quality on Competitive Advantage

Product quality has a significant positive influence in increasing the competitive advantage of manufacturing companies in the FMCG industry in Indonesia.Apart from being able to improve the company's image, the quality of the products produced by the company

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can also increase competitive advantage. Product quality has an impact on fulfilling customer expectations for the products produced, with satisfied customers it can increase the company's competitive advantage compared to business competitors who have the same business direction.

The main hope of a customer is the fulfillment of their desired needs. The perception that is formed about a product if the customer is satisfied can be interpreted as satisfaction with the quality of the product presented by the company. This is certainly a key strategy for the company to win in competition with competitors. Companies make product quality a tool to gain competitive advantage over the company (Hossain, Tasnim, and Hasan 2017).

High product quality can increase a company's competitive advantage and lead to customer loyalty to the products produced by the company. Competitive advantage can be developed by achieving the best production results as indicated by the quality of the products produced. Product quality management that continues to grow will also be followed by the growth of sustainable competitive advantage (Hoe and Mansori 2018).

The loading factor (estimate) values for product quality indicators are product performance of 0.857, features of 0.795, reliability of 0.835, suitability of 0.809, aesthetics of 0.784. Of the five product quality indicators, the highest value is the performance of the product produced, which means that manufacturing companies, especially the FMCG industry in Indonesia, with the products produced have value added value from a product, customers feel the function obtained from a product that is used. was as expected. The lowest indicator of product quality is aesthetics (the beauty of the product) where this is of course the company's focus and needs to emphasize each product by adding beauty and artistic value so that consumers are more interested in products produced by manufacturing companies, especially the FMCG industry.

CLOSING

Conclusion

The hypothesis conclusions in the research are presented as follows.

1. It is proven that there is a significant positive effect between the Implementation of Total Quality Management (TQM) on product quality. The effectiveness of TQM implemented by manufacturing companies in the FMCG industry in Indonesia will have an impact on increasing the quality of the products produced.
2. It is proven that there is a significant positive effect between the Implementation of Total Quality Management (TQM) on competitive advantage. Effective implementation of TQM in manufacturing companies in the FMCG industry in Indonesia will encourage high competitive advantage.
3. It is proven that there is a significant positive effect between product quality and competitive advantage. The quality of products produced by manufacturing companies in the FMCG industry in Indonesia will have a positive impact on increasing competitive advantage.

Research Limitations

The research that has been carried out is certainly not free from several research limitations, which are described below.

1. The number of TQM dimensions chosen as the focus of this research is limited to the dimensions of leadership, strategic planning, and customer focus.
2. The variables that build competitive advantage in this research are focused only on TQM and product quality, while there are many other variables that can be used as a way to build a company's competitive advantage, such as the Process Innovation variable.
3. The research object only focuses on FMCG manufacturing companies, which are only one of many other companies in Indonesia that also have many TQM implementations in them, such as companies in the mining, construction and banking sectors.
4. There is a goodness of fit statistical test that does not meet the specified standards, namely AGFI 0.865 < 0.90.

Future Research Agenda

It is recommended that future research agendas use the results of this research as a source of reference, as outlined below

1. Developing research on other TQM dimensions besides leadership, strategic planning, customer focus, for example process management, human resource empowerment, and information management so that we can see the impact of other TQM dimensions in building competitive advantage.
2. It is recommended to develop research by using other variables that can be used as a way to build a company's competitive advantage, such as process innovation and service quality variables.
3. The research object can be developed into other broader business fields such as mining, construction and banking which also implement TQM

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