

The Influence of Total Quality Management on Customer Loyalty with Operational Performance as Mediation

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Abstract: This study aimed to describe TQM, operational performance and customer loyalty, analyze the influence of TQM on operating performance, analyze the influence of TQM on customer loyalty, analyze the effect of operational performance on customer loyalty, and analyze the influence of TQM on customer loyalty with operational performance as the mediation variable. This research is an explanatory nature of causality through hypothesis testing. The number of samples in this study were 120 respondents. The sampling technique used is proportional simple random sampling. The analysis technique used is descriptive analysis and Analysis of Structural Equation Modeling (SEM). The analysis showed that TQM influence on operational performance. These findings can be explained that the communication described by SPG Company can communicate well, it shows that the SPG has the reliability provide an explanation that Tropicana Slim consumed because according to health standards. TQM effect on customer loyalty. These findings can be explained that the communication described by SPG Company can communicate well. Customer loyalty arising from loyal commitment is reflected in the customer has committed to purchase the Tropicana Slim for the long term. Operational performance impact on customer loyalty. These findings suggest that the reliability is reflected from Tropicana Slim consumed because according to health standards, it can establish customer loyalty is by faithfully reflected the commitment of the customer has committed to purchase the Tropicana Slim for the long term. TQM effect on customer loyalty with operational performance as mediation.

Keywords: TQM, operational performance, customer loyalty

INTRODUCTION

For managers or corporate executives, to be able to survive in business competition is how to grow and maintain customer loyalty. Customers who are loyal or loyal have an important role because loyal customers will continue to be customers, in the sense will not move to a competitor company. Attempts to grow loyal customers cannot be done at once, but through creative, innovative and efficient efforts, all of which must be able to showcase the company's competitive advantage. Customer loyalty according to Oliver is "deeply held commitment to rebuy or patronize a preferred product or service consistently in the future there by causing repetitive same brand or same brand-set purchasing, despite the situational influence and marketing effort having the potential to cause switching behavior" [1].

Given the importance or benefits that the company gains with loyal customers, growing or making someone a loyal customer and maintaining customer loyalty is a must for the company. The longer a company can retain a loyal customer, the greater the profit generated. As Griffin stated, "The longer a customer remains loyal, the more profit a business can reap from this single customer" [2]. Not only the

increase in profit gained, but there is also an increase from the increasingly loyal customers that share of customers also increased as Griffin stated that "increased cross-selling success, leading to larger share of customer" [2]. Griffin opinion is evidenced by the results of Reicheld and Sasser regarding customer loyalty obtained that "enhanced customer loyalty results in increased revenue, increased market share, reduce customer acquisition costs, and overall profitability" [3].

It is important to know what variables affect a customer's loyalty. Some studies show the results of operational performance can affect customer loyalty. Operational performance by Slack and Lewis is "the ability to compete by providing the ability to respond to customers and by developing the capabilities that will keep it head of its competitors in the future" [4]. Operational performance is very important for the company especially the achievement of optimization of operational efficiency. Prawirosentono and Primasari stated that "operational performance is the result of work that refers to the effectiveness of the use of each resource used by the company" [5]. The study by Demirbag et al. about the operational performance obtained results i.e. "operational performance

“operational performance reflects the company’s internal operating performance in term of cost and reducing waste, improving product quality, new product development, improves delivery performance, and increased productivity” [6]. The study by Kumar *et al.* get that "operational performance as a determinant of customer loyalty" [7]. Research conducted by Kumar and friends was developed based on some previous research on the influence of customer satisfaction on customer loyalty [8-10]. Next Kumar and friends used the results of a study from Vickery *et al.* about cost, flexibility, dependability, and speed as an indicator of business operational performance in manufacturing that is very important to be able to compete [11]. In contrast to Kumar and friends, Alamri *et al.* in his research using production performance improvement, employee morale, and customer satisfaction as an indicator of operational performance. Based research on Kumar *et al.*, Vickery *et al.*, and Alamri *et al.*, then the indicators for operational performance in this study are the consistency of quality, reliability, speed, and customer satisfaction [7, 11, 12].

Further research on other variables that can affect customer loyalty found that TQM can affect customer loyalty, as research conducted Chen *et al.* and Montassar and Manhawy, indicating that TQM

practices have a significant effect on customer loyalty [13, 14]. Implementation of TQM as a method in various companies is intended for the operational performance of the company to run well and succeed, maximizing the competitiveness of the company through continuous improvement of processes, products, labor so that can be enjoyed by customers who then make customers become loyal.

Earlier research also obtained results that TQM influenced operational performance as research conducted by Alamri *et al.*, Munizu; Sadikoglu and Olcay, and Terziovski and Samson [12, [15-17]. The study of the implementation of TQM or also referred to in some studies as a TQM practice uses various indicators for its research. Researchers differ in the use of TQM indicators but in general many use leadership, policy and strategy, customer focus, information and analysis, human resource focus, process management, a business result as indicators of TQM.

PT. Nutrifood Indonesia is a company that has long been implementing quality management so that in 2009 obtained the certificate of ISO 9001: 2008. Product pioneer PT. Nutrifood Indonesia is a product made from low-calorie sugar with Tropicana Slim brand that controls market share as follows:

Table 1: Market Share of Low-Calorie Sugar Products

Brand	Year 2013	Year 2014	Year 2015
	%	%	%
Tropicana Slim	79,89	82,94	79,78
Diabetasol	14,7	11,9	15,6
Equal	2,6	2,9	2,8
Thermolyte	0,68	0,32	0,18
Diasweet	1,6	1,7	1,5
Sugarleaf	0,53	0,24	0,14

Source: Sales Division PT. Nutrifood Indonesia (2016).

Looking at Table 1, Tropicana Slim's market share from 2013 to 2015 is the largest compared to other low-calorie sugar products produced by its competitors. Looking at the Tropicana Slim product market share and Griffin's opinion of "increased cross-selling success, leading to greater share of customers" [2] and Reicheld and Sasser study of customer loyalty that "enhanced customer loyalty results in increased revenue, increased market share, reduce customer acquisition costs, and overall profitability”, proving that customer loyalty will increase market share [3].

This study aims to describe TQM, operational performance, and customer loyalty; analyze the influence of TQM on operational performance, analyze the influence of TQM on customer loyalty, analyze the effect of operational performance on customer loyalty,

and analyze the influence of TQM on customer loyalty with operational performance as a mediation.

LITERATURE REVIEW

Customer Loyalty

According to Griffin opinion on loyalty is “a condition of some duration and requires that the act of purchase occur no less than twice” [2]. Griffin states loyalty can be defined in terms of buying behavior [2]. Dowling and Uncles define loyalty as “a behavioral measure (including exclusive purchase and repeat purchase probability) and an attitudinal measure (including brand preference, liking, commitment, and intention to buy”) [18]. The definition of Dowling and Uncles can be said that behavior as the basis of the concept of loyalty, where the behavior to make purchases exclusively and the possibility to make

repurchase as well as attitudes that tend to a particular brand into a measure of loyalty.

Customer loyalty is a direct factor related to the experience of consuming and using goods or services and will encourage customers to continue to do so, indicating a customer's resistance to buying or using similar goods and services. The concept of customer loyalty according to Griffin "is geared more to behavior than to attitude" [2]. When a customer is loyal, she exhibits purchase behavior defined as non-random purchase expressed over time by some decision-making unit. The term non-random is the key. A loyal customer has specific prejudices about the product and the manufacturer. Purchasing is not a random event. In addition, loyalty indicates the condition of the given time duration and requires that the purchase action takes place no less than twice. Some experts argue about customer loyalty. According to Pearson: "Customer loyalty means the propensity of customer to behave in the face of competition and choices so as maximize lifetime value" [19].

Operational Performance

Performance by Murphy *et al.* "as a set of behaviors that are relevant to the goals of the organization or organization unit of work" [20]. Simanjuntak states "performance is the level of achievement of results for the performance of a particular task" [21]. Simanjuntak further states that performance can consist of an individual performance, group performance, and company performance. Prawirosentono and Primasari stated that "performance is the result of work that can be achieved by a person or group of people in an organization in accordance with the authority and responsibility of each in order to achieve the organizational goals" [5]. Furthermore, Prawirosentono and Primasari divide the types of performance in the organization of the company namely administrative performance, operational performance, and strategic performance [5].

Operational performance according to Slack and Lewis "the ability to compete by providing the ability to respond to customers and by developing the capabilities that will keep it head of its competitors in the future" [4]. Thus, operational performance provides an overview of the company's capabilities in terms of competitiveness, responding to customer expectations and needs by developing better capabilities from competitors for the long term. Suta further defines operational performance as "the periodic determination of the company's appearance in the form of operational activities, organizational structure and employees based on predetermined targets, standards, and criteria" [22]. Prawirosentono and Primasari define operational

performance as "work that refers to the effectiveness of the use of each resource used by the company" [5].

Slack and Lewis expressed the benefits of good operational performance associated with the five basic operational performance goals for the company Stakeholders, as follows [4]:

- a. Quality: error free processes, less disruption, lower processing cost, high specification product, and error free product.
- b. Speed: faster throughput times, less queuing, lower overhead, lower processing cost, short delivery/queuing times, and fast response to requests.
- c. Dependability: higher confidence in the operation, more internal stability, lower processing cost, and on time delivery/arrival products.
- d. Flexibility: better response to unpredictable events, better response to variety of activities, lower processing cost, frequent new products, volume adjustments, and delivery adjustments.
- e. Cost: productive processes, higher margins, and low prices.

Performance is something that is difficult to understand because its definition, structure, and measurement are multidimensional. Some approaches can be used to measure performance: performance indicators based on investors, performance indicators based on customers, performance indicators based on suppliers, and government [23]. Operating performance factors for manufacturing firms have been developed in operational lines, identifying such factors as cost, flexibility, quality, dependability, and speed as critical manufacturing competitive priorities [11], [4]. Roth and Velde also develop operational performance factors in the company or service sector that are pointed out courteous service, customer relationships and consistent service as the most critical competitive priorities for service companies [24]. Operational performance was also developed by Parasuraman *et al.* in an SERVQUAL model consisting of reliability, responsiveness, assurance, empathy and tangible [8].

Total Quality Management (TQM)

The definition of quality according to Gaspersz is a description of the direct characteristics of a product such as performance, reliability, ease of use and aesthetics [25]. The strategic quality definition is anything that can meeting the needs of customers. Juran says that quality is a fitness for purpose, or in other words, the conformity of the product and its purpose or benefit [26]. According to Feigenbaum, the definition of quality is as follows, namely the total product and service characteristics of marketing engineering, manufacture and maintenance through which the

product and service will meet the expectation of the customer [27]. Goetsch and Davis state that Quality is dynamic state associated with product, services, people, processes, and environments that meet or exceeds expectations and helps produce superior value [28].

TQM is defined by Gaspersz as a way of improving continuously performance improvement at every level of operation or process, within each functional area of an organization, using all available human and capital resources [25]. Render and Heizer defines TQM as "Commitment by management to a continuing companywide drive toward excellence in all aspects of product and services that are important to the customer" [29]. TQM emphasizes the commitment of management to have a sustainable desire for the company to achieve perfection in all aspects of goods and services that are important to consumers ". Furthermore, Tjiptono and Diana define "TQM is a quality management system as a business strategy and customer-oriented by involving all members of the organization" [30].

Research Hypothesis

- H₁ : Total Quality Management has a positive and significant impact on operational performance.
- H₂ : Total Quality Management has a positive and significant impact on customer loyalty.
- H₃ : Operational performance has a positive and significant impact on customer loyalty.
- H₄ : Total Quality Management affects customer loyalty with operational performance as a mediation.

RESEARCH METHODS

Operational Definition of Variables

- a. TQM (X₁)
TQM is the wish to continuously develop excellence from quality-related products with customer focus indicators, continuous improvement, information, communication, and product design.
- b. Operational Performance (Y₁)
Operational performance is the result of work or achievement of the results of a measured operational activity through quality, reliability, and speed of work oriented to the customer, with indicators of quality consistency, reliability, speed, and customer satisfaction.
- c. Customer Loyalty (Y₂)
Customer Loyalty is the intensity of purchases made by the customer within a period of at least 1 year to the product offered by the seller, with indicators of recommendation, persistence, and loyal commitment.

Population and Sample

The population in the study were customers who consumed the Tropicana Slim low-calorie sugar, which made purchases at the outlet Pareto of the modern shopping center of East Jakarta City namely Carrefour, Hypermart, Tip Top, Extra Giant, Dragon Supermarket, and Super Indo, whose numbers cannot be known for sure. Existing data are Pareto outlet visitors in East Jakarta's modern shopping mall on average for 2016 as many as 18,900 visitors (weekdays) and 39,450 visitors (weekend), with a total monthly total of 58,350 visitors (Sales Division Jakarta PT Nutrifood Indonesia, 2016). The visitor data does not show the number of customer population because first, the visitor just asks about Tropicana Slim. Second, visitors buy but cannot be identified how many times visitors buy and consume Tropicana Slim, and how long visitors buy and consume Tropicana Slim.

The sample of the study was a customer who consumed a Tropicana Slim low-calorie sugar who made a purchase within a minimum of 1 year, and at the time of the study, the number was not known with certainty. The sample for structural equation model analysis requires an amount of between 5 to 10 times the numbers of indicators used. The number of samples in this study as many as 120 respondents obtained from 10 X 12 (number of indicators). The sampling technique used is purposive sampling with the criterion has been a customer for at least 1 year, buying at Carrefour pareto outlet, Hypermart, Tip Top, Extra Giant, Dragon Supermarket and Super Indo and just buy and consume Tropicana Slim low-calorie sugar.

Data Analysis Technique

To analyze the influence of TQM on customer loyalty through company operational performance used descriptive analysis method and Structural Equation Modeling (SEM) analysis.

RESULTS AND DISCUSSION

a. Normality Test

Based on the result of multivariate CR value data processing 1,270 which is between -2.58 to 2.58, it is concluded that multivariate normality assumption has been fulfilled, a thus assumption of normality needed by SEM analysis has been fulfilled.

b. Outlier Test

The result of outlier test with Mahalanobis distance squared shows that observation variable has Mahalanobis Distance Observed Variable which is detected as smaller than chi square table (df = 12, α = 0,001) that is 32,91, and show that 12 indicator used in this research None of which contain outliers.

Results of SEM Analysis

In accordance with the study of literature and research objectives, then developed the overall

structural model as follows:

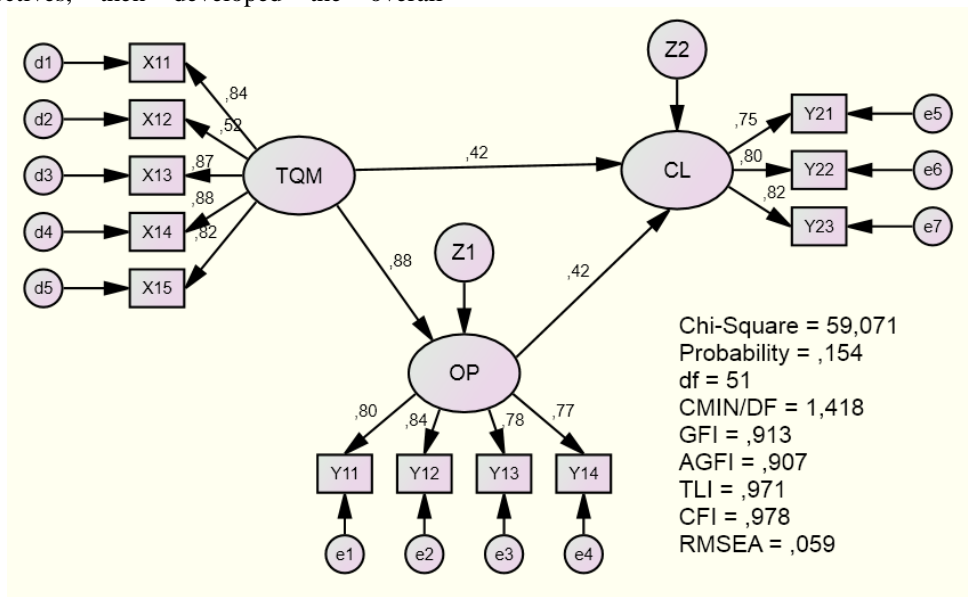


Fig-1:

Information :

- TQM (Total Quality Management)
- X₁₁ : Customer focus
- X₁₂ : Continuous improvement
- X₁₃ : Information
- X₁₄ : Communication
- X₁₅ : Product design

OP (Operational Performance)

- Y₁₁ : Consistent quality
- Y₁₂ : Reliability
- Y₁₃ : Speed
- Y₁₄ : customer satisfaction

CL (Customer Loyalty)

- Y₂₁ : Recommendation
- Y₂₂ : Last
- Y₂₃ : Loyal commitment

Source: Primary data processed, 2017.

Results of SEM Analysis

Based on AMOS 18 computations for this SEM model, a goodness of fit indexes are presented in Table 2. Furthermore, these index values are compared

with the cut-off values of each index. A good model is expected to have the goodness of fit indices that are greater or equal to the critical value.

Table 2: Test Result of Goodness of Fit Modified Structural Model

Goodness Of Fit Index	Cut-off Value	Model Results	Information
Chi-Square (df = 51)	68,67	59,071	Good
Probability Chi-Square	≥ 0,05	0,154	Good
CMIN/DF	≤ 2,00	1,418	Good
RMSEA	≤ 0,08	0,059	Good
GFI	≥ 0,90	0,913	Good
AGFI	≥ 0,90	0,907	Good
CFI	≥ 0,95	0,978	Good
TLI	≥ 0,95	0,971	Good

Source: Primary data processed, 2017

Based on the evaluation of the Goodness of Fit Indices criteria in Table 2, it shows that the evaluation of the overall model has met, the model is acceptable.

Table 3: Hypothesis Testing

Hip	Variable			Coefficients Regression				Result
	Exogenous	Mediation	Endogenous	Direct		Indirect	Total	
				Coef.	P Value			
H ₁	TQM	-	Operational Performance	0,880	0,000*	-	0,880	Supported
H ₂	TQM	-	Customer loyalty	0,420	0,038*	-	0,420	Supported
H ₃	Operational Performance	-	Customer loyalty	0,424	0,041*	-	0,424	Supported
H ₄	TQM	Operational Performance	Customer loyalty	0,420	0,038*	0,880 x 0,424 = 0,373	0,793	Supported

* Significant at $\alpha= 5\%$

DISCUSSION

The Influence of TQM on Operational Performance

Operational performance reflects and provides an overview of the company's competency in terms of competitiveness by constantly developing consistent operational capabilities to deliver quality products, reliability, and prompt response to everything related to customer expectations and needs. As Suta opinion that operational performance is the periodic determination of the company's appearance in the form of operational activities, organizational structure and employees based on predetermined targets, standards and criteria [22]. Operational performance in this study is described by the reliability of Tropicana Slim can be used for a variety of food drinks, both consumed because it complies with health standards, and can be stored for long periods of time.

Operational performance that can meet the expectations and needs of customers certainly does not happen by itself, this is due to the concept of TQM as TQM concept according to Gaspersz is a way to improve performance continuously at every level of operation or process, in every functional area of an organization, using all available human and capital resources [25]. Thus the application of TQM is required to be a guideline that requires management and all employees have a commitment and play an active role to achieve performance improvement at each level of operation and achieve perfection in all aspects of products that are important to customers. This is supported by Hessel's study of the relationship between TQM's implementation with operational performance and competitive advantage of manufacturing companies, whose results indicate that TQM is an important requirement for improving operational performance and enhancing the competitiveness of enterprises [31]. The results of this study are also in line

with Alamri *et al.*, Munizu, Sadikoglu and Olcay stating that TQM affects operational performance [12, 15, 16].

The results of this study, the main thing of TQM that can improve operational performance is communication. This is reflected in the company's SPG can communicate well supported with knowledge of the superiority of Tropicana Slim products. The ability to communicate SPG both individually and in groups will also facilitate the company to obtain information about customer expectations and needs, and this will be a feedback for the company to improve operational performance, especially how PT. Nutrifood Indonesia is fast in responding to customers, can make Tropicana Slim products are reliable and consistently maintain and improve quality.

The Influence of TQM on Customer Loyalty

Customer loyalty is a direct factor that relates to the experience of consuming and using goods or services, and will continue to consume and use if goods or services are in line with expectations and needs despite marketing and similar business influences to change those habits This is in line with Kotler's concept and Keller is "Customer loyalty is strongly held commitment to buy and buy again or subscribe to a particular product or service again in future despite influence of marketing and business situations that could potentially lead to switching behavior" [32]. Thus it can be interpreted, that the need for a quality management system or TQM to design and produce products in all aspects according to customer expectations and needs that impact on customer loyalty.

This research indicates that the customer deeply appreciates communication as TQM practice in this case communication ability by SPG company. The ability of SPG communication with understandable

language and knowledge of the benefits of Tropicana Slim products can convince and keep customers loyal to buy and consume Tropicana Slim, and in this case the majority of women (55%) strongly believe that consuming Tropicana Slim as a way to High-calorie diet to keep the ideal body shape. SPG is able to convey to the customer the main thing that PT. Nutrifood Indonesia performs a sustainable improvement that includes product quality that matches expectations and needs and positively impacts the customer. Due to good SPG communication skills, customers also feel that Tropicana Slim is designed and created and focused on customers who adopt healthy lifestyles, diets, and those with high blood sugar (diabetes). Communication is a very important aspect of continuous improvement. Without communication, continuous improvement can not be done properly. Good and conductive communication is not only required between management with employees and fellow employees communication, but good communication skills with customers are also required so that all aspects that include processes and products are delivered to customers as well as obtaining information about customer expectations and needs.

The respondents of this study are customers who buy and consume Tropicana Slim within a minimum of 1 year that can be categorized as loyal customers, and consume Tropicana Slim in a day as much as 2-5 sachets (52.5%). Every customer remains due to the influence of the company's TQM practices in particular the ability to communicate well from the company's SPG, as well as the company's ability to make continuous improvements in customer-focused top quality design and products. The results of this study are in line with Chen *et al.*, Montasser and Manhaway which states that TQM affects customer loyalty [13, 14].

Effect of Operational Performance on Customer Loyalty

The results of this study indicate that the operational performance affecting customer loyalty is reflected from the customers highly appreciate the reliability of the operational performance, and in this case, the customer believes that Tropicana Slim is well consumed for compliance with health standards. It is very meaningful for customers to support a healthy lifestyle with a diet of sugar, and at the same time to help customers control blood sugar levels, and the impact customers are loyal to buy and consume Tropicana Slim, which is widely contributed by customers aged over 41 years (42.5%) due to the controlling pattern of sugar in the blood has become the need to maintain health or the application of healthy lifestyle (62.5%). The research also gives an overview

of operational performance of PT. Nutrifood Indonesia in terms of ability to compete, respond to customer expectations and needs, and this is in accordance with the concept of operational performance of Slack and Lewis is "the ability to compete by providing the ability to respond to customers and by developing the capabilities that will keep it head of its competitors in the future" [4].

Tropicana Slim customer loyalty illustrates the main of loyal customer commitment committed to re-purchase Tropicana Slim for the long term, and proven consumers have been a customer Tropicana Slim for at least 1 year and consume 2 - 5 sachets in 1 day (52%). This indicates that the operational performance becomes a consideration and encourages customers in deciding to consume Tropicana Slim. In relation to the success of the operational performance, PT. Nutrifood Indonesia conveys to consumers in the form of tagline that is low calorie, sweet taste, prevent diabetes, and sugar-free. This tagline is in line with examples of operational performance messages conducted and delivered by Komatsu namely: "management principle is a commitment to quality and reliability to provide safe and innovative products and service quality to improve business reliability". Similarly, the Inter-Continental Hotels Group is: "The management team develops products of high quality, service standards with benefits appropriate to economies of scale, and is supported by good infrastructure so that consumers get a very memorable experience" [4]. Similarly, its relevance to previous research, that the results of this study support the research Kumar *et al.* which states that operational performance has a direct impact on customer loyalty [7].

The Influence of TQM on Customer Loyalty with Operational Performance as a Mediation

TQM practices reflected in customer focus, continuous improvement, information, communication and product design affect customer loyalty. This is understandable because PT. Nutrifood Indonesia is a company that has long been implementing quality management that has principles such as customer focus and continuous improvement. The benefits gained from implementing quality management are understanding customer needs and expectations, and communicating the importance of meeting customer needs and expectations across all levels of the organization. Application of quality management at PT. Nutrifood Indonesia reflected from TQM practices, especially communication as the main of TQM can increase customer loyalty. This research indicates that the customer deeply appreciates communication as TQM practice in this case communication ability by SPG company. Good SPG communications supported by

good knowledge of Tropicana Slim products can assure and influence loyal customers to buy and consume Tropicana Slim. It can be argued that the implementation of quality management reflected in TQM practices can affect customer loyalty. This research can be interpreted that good SPG communication is able to convince customers to stay loyal to buy and consume Tropicana Slim for long term, and can counteract negative issue about Tropicana Slim.

The research also obtained the result that good communication as part of TQM practices is able to realize the improvement of operational performance, in particular, the continuous improvement that can meet customers' expectations and needs, and it is in line with Gaspersz opinion that integrated quality management (TQM) as a way of improving Continuous performance at every level of operation or process, within each functional area of an organization, using all available human and capital resources [25]. The results of this study are also in line with Alamri *et al.*, Munizu, Sadikoglu and Olcay which states that TQM affects operational performance [12, 15, 16]. The findings of the study support the research by Kumar *et al.* namely operational performance affecting customer loyalty [7].

Operational performance provides an overview of the company's competency in terms of competitiveness, response to customer expectations and needs by developing better capabilities from competitors for the long term, and in this case the customer greatly appreciates the operational performance of the company especially the reliability of the Tropicana Slim, and in other words research gives results that operational performance can improve customer loyalty.

The findings of the research results show the role of TQM in increasing customer loyalty reinforced by the existence of good operational performance, in this case reliability which is the main indicator of the most appreciated by the customer. Operational performance can mediate the influence of TQM on customer loyalty can be interpreted that the operational performance is reflected by a consistency of quality, reliability, speed, and customer satisfaction is proven and in accordance with that delivered by SPG company. In a sense, everything related to the superiority of Tropicana Slim product (as a reflection of operational performance and in this case reliability) delivered by SPG is actually felt by the customer, and indeed in accordance with the expectations and needs of customers. Operational performance reflected by the reliability of Tropicana Slim can be used for a variety of beverage foods, both consumed because it complies with health standards and can be stored for long periods of time, into consideration of customers to loyal to

Tropicana Slim products. Customer loyalty in this study is illustrated by customers committed to re-purchase Tropicana Slim for the long term, committed to consuming Tropicana Slim for the long term and committed not to be affected by negative issues Tropicana Slim.

This study has provided theoretical meaning that operational performance strengthens TQM's influence on customer loyalty. Indicators of operational performance that contribute the most are reflected in the reliability of Tropicana Slim is well consumed because it complies with health standards. SPG's ability to communicate the benefits of Tropicana Slim that match health standards will support customers to remain faithful to consuming Tropicana Slim.

The role of operational performance as an intervening variable that can mediate the influence of TQM on customer loyalty is an important finding of this research as well as a contribution to science. This is different from the findings of research conducted by Montassar and Manhawy, and Chen *et al.* that customer satisfaction may mediate or reinforce the influence of TQM on customer loyalty [14, 13]. Another important finding of this research is that TQM directly affects customer loyalty, the results are different from previous studies that influence TQM on customer satisfaction and impact customer loyalty. However, this study has the limitations of determining the actual population size, in this case, is the total number of customers who buy and consume Tropicana Slim at the location, place and time conducted research.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

1. Based on the results of descriptive test :

- a. TQM is perceived to be formed from Customer focus, continuous improvement, information, communication, and product design. The biggest contribution to TQM is communication. Good internal communication encourages good operational performance, and external communications reflected by the ability of SPG to communicate well received customer appreciation.
- b. Operational performance is shaped by consistency of quality, reliability, and speed and customer satisfaction. The main thing that shapes the operational performance is reliability, and reliability together with the consistency of quality contribute greatly in operational performance. Operational performance provides an overview of the company's capabilities in terms of competitiveness, responding to customer

expectations and needs by developing better capabilities from competitors for the long term.

- c. Customer loyalty is formed from recommendations, persisting and loyal commitment. The main thing in customer loyalty building is faithful commitment and at the same time contributing the most, reflected by customers committed to repeating purchase Tropicana Slim for long term.

2. TQM has an effect on operational performance.

The findings of the research indicate that TQM has a positive and significant impact on operational performance, and it means that TQM is needed to guide and encourage management and all employees have commitment and active role to achieve performance improvement in every level of operation and achieve perfection in every aspect of product that is important for customer.

3. TQM has an effect on customer loyalty.

This finding explains that TQM has a positive and significant impact on customer loyalty, and it can be interpreted that there is a need for a quality management system or TQM to design and produce products in all aspects of customer expectations and needs that impact on customer loyalty.

4. Operational performance has an effect on customer loyalty.

This finding explains that the operational performance has a positive and significant impact on customer loyalty as reflected by the customers highly appreciate the reliability of the operational performance, and in this case the customer believes that Tropicana Slim is well consumed as it complies with the health standard.

5. TQM affects customer loyalty with operational performance as a mediation. Operational performance is the strengthening (mediation) influence of TQM on customer loyalty, because the value of influence by through mediation is greater than direct influence. This provides the meaning of customer loyalty in the form of a loyal commitment can be built if the operational performance formed from the TQM practice is able to meet the expectations and needs of customers.

Recommendation

1. Theoretically

- a. As a reference for developing and enriching the science of operational management especially the conception of operational performance in

terms of cost, speed, and flexibility that can build customer loyalty.

- b. This research can be further implemented as a reference for subsequent research in the field of quality management and practice of TQM especially for information and communication indicators in companies in the service sector.
- c. PT. Nutrifood Indonesia can use the research results to develop a conceptual model of cooperation with high loyalty customers (premium customers) to share experiences during consuming Tropicana Slim to low sugar and sugar consumed.
- d. An operational performance measurement model should be designed to demonstrate the specific needs of customers that can be translated precisely into the matrix of operational performance characteristics that can be compared with the characteristics of the company's operational processes as managerial practices for firms.

2. Practically

- a. In order to maintain customer loyalty, PT. Nutrifood Indonesia can strengthen the communication that has been well run by SPG by considering the use of multi-channel communication media, i.e. communication with each individual customers via the Internet and catalog operations into the company's sales channels.
- b. TQM practice in terms of continuous improvement can be used by companies to gain customer appreciation as well as a major contribution to TQM practice.
- c. To future researchers to examine the product categories of convenience with consumers who consume the product can be determined the number of population.

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