
Analysis of Product Variation, Quality of Service and Their Effect on Customer Satisfaction

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ABSTRACT

Purpose: This research aims to determine the effect of either partially or simultaneously of the variable product variation and service quality on customer satisfaction

Design/methodology/approach: The data used of primary data which obtained by questionnaire, observation, interview and documentation methods. The sample is 96 customers done by accidental sampling method. The data analysis tool used multiple linear regression model, while hypothesis testing was done by F test and t test at five percent alpha

Findings: The result reveal that the product variation and service quality had a significant simultaneous and partial effect on customer satisfaction, furthermore there is evidence the strong relationship between the variables of product variation and service quality with customer satisfaction

Research limitations/implications: This research is only carried out in one company as the object of research. Further researchers can conduct research from several companies so that the study results can be generalized

Practical implications: The results of this study will provide to the management and the company in increasing profitability through the consumer satisfaction. The results of the study also provide theoretical implications as a reference in costumer satisfaction.

Originality/value: Determine the effect of product variations and service quality either simultaneously or partially on customer satisfaction.

Paper type: Research paper

Keyword: Customer Satisfaction, Product Variation, Service Quality.

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I. INTRODUCTION

Study in determining the factors of customer satisfaction in retail sales has been extensive growth in academicians. However, the increasing competition in this field demands a more in-depth investigation of the factors that influence customer satisfaction. Customer satisfaction is influenced by several things, including on customer understanding of the value of products and the quality of services, it will ultimately affect customer satisfaction. However, there are many other factors that may affect customer satisfaction (ELSamen & Alshurideh, 2012), and also customer satisfaction leads to customer loyalty. In addition, the company's financial results are directly affected by customer loyalty (Vilares & Coelho, 2003).

Related with this condition, bakery business opportunities which is Rotte Bakery Company become a fast growing business. Rotte Bakery company was founded in 2015 by Mr. Syafrizal in Pekanbaru. Previously, he had been in the bread business since 2007, but only made pastries for the month of Ramadan and donuts. This is where the forerunner of the establishment of Rotte Bakery. Currently Rotte Bakery is

growing rapidly with 38 outlets spread throughout Riau. Rotte Bakery produces various types of products. This is intended so that customers can adjust their needs with the products provided.

'Bread' is one of the most popular substitutes for rice. Bread is usually eaten at breakfast, as a companion to drinking coffee, or it can also be a solution to block a hungry stomach before lunch. For those who don't like eating rice at night, bread is also often an option. As a snack, bread is a food that can be enjoyed by all ages, from children, teenagers, to adults, most of them definitely like bread. This flour-based food is also always needed at various events. From recitation events, social gatherings, seminars, to weddings, bread is almost always used as snacks and treats. The high level of public interest and need for bread shows that the opportunities in this business can still be bigger. Therefore, it is not surprising that many people try their luck in the bakery business.

In early observation showed that the types of products produced are white bread, pillow bread, large and mini breads, sweet breads, and donuts. However, in sales of bakery products at Rotte Bakery recently showed fluctuations for each type of product they produced. However, for certain products, it shows that the type of Mini bread product with the product name Fit-O mini is more in demand. Because this bread has a delicious and soft taste and a lower price than other types of bread. Furthermore, the results of interviews with the marketing department also said that customers always ask for special mini chocolate bread which has a distinctive taste of chocolate, and donuts that have delicious and soft quality.

The production department tries to fulfill the customer's wishes by producing mini bread products with various variants. This is done with the aim of increasing market share and creating customer satisfaction. Therefore, here we see the importance of the role of product variants on customer satisfaction. However, customer satisfaction is not only limited to product variations, but service quality also plays an important role in creating customer satisfaction. According to Moenir (2015), service quality is an activity carried out by a person or group of people based on material elements by using certain systems, processes, and techniques to suit the needs of others. Customer service is the behavior of sellers desired by buyers in order to fulfill their demands and desires. Companies must provide excellent service to their clients, and every employee must be able to provide good, fast, optimal, and full service to these consumers, so that they are satisfied with the company's services.

According to Lupiyoadi & Hamdani (2011) and Turki Alshurideh et al. (2014), there are 5 factors that influence consumer there are: 1) satisfaction of product quality, it means that consumers feel satisfied when their results show that the products they use are of high quality. 2) Quality of service or services, namely consumers will feel satisfied if they get good service or as expected. 3) Emotions, namely consumers will feel proud and gain confidence that other people will be amazed by him when using products with certain brands which tend to have a higher level of satisfaction. The satisfaction obtained is not because of the quality of the product but social or self-esteem that makes consumers feel satisfied with certain brands. 4) Price, namely the product has the same quality but set a relatively cheap price will provide a higher value to consumers. 5) Costs, namely consumers who do not need to incur additional costs or do not need to waste time to get a product or service tend to be satisfied with the product or service

Product is a combination of goods and services that the company offers to the target market. According to Kotler & Keller (2013) a product is anything that can be offered to the market to attract attention, acquisition, use, or consumption that can satisfy a want or need. Products include more than just tangible goods. According to Sudaryono (2016:207) a product is something that is offered to the market to be noticed, owned, used, or consumed so as to satisfy wants and needs. (Groover, 2010) also defined product variations interpreted as products that have different designs or types produced by the company. Product variety is what distinguishes products produced by the same company. Alshurideh (2016) stated that Product variety is a company's strategy in fulfilling customer desires and expectations. Someone's feelings of pleasure or disappointment that arise after comparing expectations with the performance of service providers. A product is usually followed by a series of attributes that serve as the identity of the product.

According to Kotler & Keller (2013) product variety (product mix) is a collection of all products and goods offered by certain sales to consumers. The product mix or product variety of a company can be classified according to width, length, depth and consistency. According to Kotler & Keller (2013) product variation is a product mix, also known as product selection, which is a collection of all products and goods offered and sold by a particular seller. According to Groover (2010) said that product variations can be interpreted as products that have different designs or types and are produced by the company. Product variety is what differentiates products between companies in the same product category. According to Kotler & Keller (2013) the product variation indicators are: 1) Size which defined as the shape, model and physical structure of a product that can be seen and can be measured. 2) Price is the amount of money that has an exchange rate to gain the advantage of owning or using a product or service. 3) Display, is everything that is displayed by the product, the display is the attraction of the product that is seen directly by consumers. The

appearance in a product packaging can be interpreted as something that is visible to the eye and is attractive to consumers to make purchasing decisions for the product. The appearance of the product packaging has a design, color compatibility so that it can attract consumers to make purchasing decisions. 4) Availability of products Product availability, namely the number of items available in the store, makes consumers more interested in making purchasing decisions.

The purpose of this study was to determine the effect of product variations and service quality either simultaneously or partially on customer satisfaction. Therefore, customer satisfaction is an important factor for companies that aim to maximize profits. Customer satisfaction is one of the key indicators of the success of a company. As a result, to provide customer satisfaction, businesses must know what they want, where the customer's desires are always changing all the time. According to Dwiastuti et al. (2012) customer satisfaction is a condition where the needs, desires and expectations of consumers for a product and service are in accordance with or fulfilled by the appearance of the product and service. Satisfied consumers will consume these products continuously, encourage consumers to be loyal to a product and service and be happy to promote these products and services by word of mouth. In line with previous research, conducted a study in Surabaya and the results of his research concluded that there was a positive relationship between product variations and customer satisfaction, as well as a strong relationship between service quality and customer satisfaction. Furthermore, Yuwono & Yuwana (2017) proves that there is a significant effect between product variants and customer satisfaction, as well as a strong relationship between service quality and customer satisfaction at King's Stores in Malang. Based on this description, the formulation of the research problem is how the influence of product variations and service quality either simultaneously or partially on customer satisfaction at Rotte Bakrey.

According to Kotler & Keller (2013) there are 3 aspects of customer satisfaction, 1) Loyal to the product. Satisfied consumers tend to be loyal. Consumers who are satisfied with the products they consume will have a tendency to repurchase from the same manufacturer. The desire to repurchase because of the desire to repeat a good experience and avoid a bad experience, 2) there is positive word of mouth communication. Satisfaction is a factor that encourages positive word of mouth communication. 3) this would be form of recommendations to other potential customers and saying good things about the product and the company that provides the product. 4) The company is the main consideration when buying other products. This is a cognitive process when there is satisfaction, where consumers prefer the same company to get services or products from that company.

The definition of service quality or service quality is centered on efforts to fulfill customer needs and desires and the accuracy of delivery to balance customer expectations. The definition of service quality or service quality. Service quality is the level of excellence expected and control over the level of excellence to meet customer desires. The definition of service quality or service quality is a reflection of consumers' evaluative perceptions of the services received at a certain time. Service quality is determined based on the level of importance of the service dimensions. Based on the two definitions of service quality above, it can be seen that there are two main factors that influence service quality, namely the service expected by consumers and the service received or perceived by consumers or the perceived results.

Many dimensions can be used to measure service quality or service quality. There are at least four concepts of service quality measurement, namely: Nordic Model, SERVQUAL model, Three-Component Model, and Multi Model (Tjiptono, 2012). Brady & Cronin (2001) measure service quality based on the Multi Model which includes three dimensions, namely the quality of interaction, the quality of the physical environment and the quality of results. The following reviews the dimensions of service quality according to Parasuraman et al. (1988) and Brady & Cronin (2001). Parasuraman et al. (1988) compile the main dimensions that are the main factors determining service quality as: Reliability, it mean that the ability to deliver the promised service reliably and accurately. Responsiveness, namely the willingness to help consumers by providing fast and appropriate service. Assurance, which includes knowledge, ability, and courtesy or kindness of the person as well as the ability to gain trust and desire. Empathy, which includes maintaining and giving individual or personal levels of attention to consumer needs. Tangible (direct evidence), which includes physical facilities, equipment or supplies, prices, and personal appearance and written materials.

The dimensions of service quality can be used to measure the service quality of a service company. Measuring service quality means evaluating or comparing the performance of a service with a set of predetermined standards (Parasuraman et al., 1988). For the measurement model, we have created a multi-item scale called SERVQUAL. The servqual scale was first published in 1988, and consists of twenty-two question items, which are distributed thoroughly on the five dimensions of service quality. The servqual scale is intended to measure customer expectations and perceptions, and the gaps that exist in the service quality model. Measurements can be carried out using a Likert scale or differential semantics, and respondents only

need to choose the degree of agreement or disagreement with questions regarding service quality delivery. Based on discussion and several previous research the hypotheses are:

H1: It is suspected that product variations and service quality have a simultaneous effect on customer satisfaction at PT. Rotte Variety of Flavors

H2: It is suspected that product variations have a partial effect on customer satisfaction at PT. Rotte Variety of Flavors.

H3: It is suspected that service quality has a partial effect on customer satisfaction at PT. Rotte Variety of Flavors

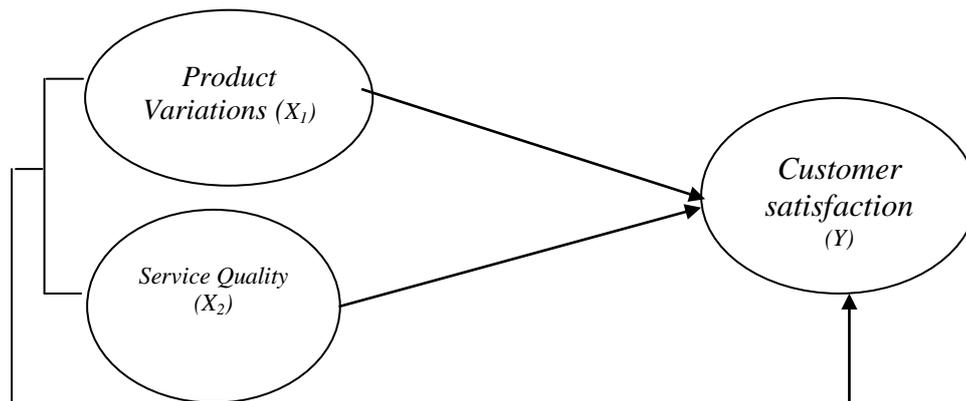


Figure 1: Research Model

II. METHODOLOGY

This research was conducted from May to June 2021, at PT. Rotte Variety of Flavors. The population in this study were all customers, while the sample of this study was 96 customers. The number of sample is considered to meet (Ghozali, 2017). Sampling method was done by accidentally simple random sampling method. This study uses primary data, obtained through questionnaires, observations, interviews and documentation. Hypothesis testing in this study was carried out through the F test and t test using = 5%. The data analysis tool used is a multiple linear regression model with the equation as follow:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$$

Information:

Y = Customer satisfaction

α = Constanta

β_1, β_2 = Regression coefficient

X_1 = Product Variations,

X_2 = Service Quality,

ε = Error Term

III. RESULTS AND DISCUSSION

Based on the results of data processing carried out using the Statistical Product and Service Solution (SPSS) version 25 the following multiple linear regression equation was obtained:

$$Y = 10,190 + 0,709 X_1 + 0,102 X_2$$

The result mean that the constant of 10.190 is obtained. It is assumed that product variations and service quality do not exist (equal to zero), then customer satisfaction is still present at 10,190 units. The regression coefficient of the product variation variable was obtained at 0.709. These results explain that if it is assumed that product variation increases by 1 unit while service quality is constant, customer satisfaction will increase by 0.709 units and vice versa. Furthermore, the regression coefficient of the service quality variable is

obtained at 0.102. These results explain that if it is assumed that service quality increases by 1 unit while product variation is constant, then customer satisfaction will also increase by 0.102 units and vice versa. The results of data processing from this study also obtained a calculated F value as shown in Table 1 below:

Table 1. Simultaneous Test Results (Test F)

<i>Model</i>	<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>	<i>Information</i>
<i>Regression</i>	<i>2997,067</i>	<i>2</i>	<i>1498,534</i>			
<i>Residual</i>	<i>3241,891</i>	<i>93</i>	<i>34,859</i>	<i>42,988</i>	<i>0,000</i>	<i>Significant</i>
<i>Total</i>	<i>6238,958</i>	<i>95</i>				

Source: Data Processed Using SPSS

From Table 1, it is known that the calculated F value is 42,988 with a significance value of 0.000. By using 5% alpha, the significance is lower than the alpha value, which is $0.000 < 0.05$. These results explain that there is a simultaneous significant effect of product variation and service quality variables on customer satisfaction. In other words, if there are more product variations and better service quality, then customer satisfaction will increase and vice versa. Thus the first hypothesis in this study was accepted at the 95% confidence level. Furthermore, partial hypothesis testing is carried out, and the results of data processing for partial testing (t-test) can be seen in Table 2:

Table 2. Partial Test Results (t test)

<i>No</i>	<i>Model</i>	<i>t</i>	<i>Sig</i>	<i>Information</i>
<i>1</i>	<i>Product Variations</i>	<i>8,287</i>	<i>0,000</i>	<i>Significant</i>
<i>2</i>	<i>Service Quality</i>	<i>1,239</i>	<i>0,022</i>	<i>Significant</i>

Source: Data Processed Using SPSS Version.25

From Table 2, it is known that the significance value of the t-count variable for product variation is 0.000. This significance value is lower than the alpha which is $0.000 < 0.05$. This means that the more product variations increase customer satisfaction and vice versa, assuming service quality does not change. Thus the second hypothesis of this study was accepted at the 95% confidence level. Then the t count of the service quality variable has a significance t count of 0.022. This means that the significance value of t arithmetic is lower than alpha, namely $0.022 < 0.05$. This can be interpreted if the quality of service increases then customer satisfaction will increase assuming constant product variation. Then the third hypothesis is accepted at the 95% confidence level. The results of data processing also provide the correlation coefficient (R) of the multiple linear regression equation. The magnitude of the correlation coefficient can be seen in Table 3.

Table 3. Correlation Coefficient (R) and Coefficient of Determination (R2)

<i>Model</i>	<i>R</i>	<i>R Square</i>	<i>Adjusted R Square</i>	<i>Std. Error of the Estimate</i>
<i>1</i>	<i>0, 893</i>	<i>0, 680</i>	<i>0, 769</i>	<i>8,904</i>

Source: Data Processed Using SPSS Version.25

The R coefficient in Table 3 is 0.893. This explains that there is a strong positive relationship between the variables of product variation and service quality with customer satisfaction, which is 89.3%. From Table 3 also obtained the coefficient of determination (R²) of 0.680. These results explain that the variation of up and down customer satisfaction by 68% is determined by the variables of product variation and service quality, while the remaining 32% customer satisfaction is determined by factors other than product variations and service quality.

Based on the results of this study, there is a significant effect of product variation and service quality variables on customer satisfaction at PT. Rotte Ragam Rasa Branch Soekarno Hatta Pekanbaru, this is proven in the results of the hypothesis simultaneously and partially at the 95% confidence level. So that the three hypotheses proposed in this study are accepted. Seeing these results, the variety of products and service quality is a determining factor for creating customer satisfaction at PT. Rotte Variety of Flavors Soekarno Hatta Pekanbaru Branch. Customer satisfaction is a match between customer expectations and the reality received by customers on a product or company. The progress or decline of a company really depends on the customer satisfaction of the company. Therefore, customer satisfaction is something that must be achieved for every company, so that the company continues to grow and develop in the future, this also happens to PT. Rotte Variety of Flavors. The importance of customer satisfaction for companies, this is emphasized by Daryanto & Setyobudi (2014) who state that customer satisfaction is an evaluation of each customer based on a comparison of the current state with the anticipated conditions. Customers will be happy if the product or service provided by the organization matches their expectations. On the other hand, if a company's product or service fails to meet customer expectations then the customer is dissatisfied. This will have an impact on the development of the company in the future.

The results of this study in principle support the research conducted by (Ekowati et al., 2020). Where the results of this study conclude that each independent variable (product quality, display layout, and product variety) has a significant positive effect on the dependent variable (consumer satisfaction). The magnitude of the influence of each independent variable on the dependent variable (consumer satisfaction) is product quality by 26.25%, display layout by 62.10%, and product variation by 25.13%. For simultaneous results (F test) independent variables (product quality, display layout, and product variations) also have a significant positive effect on the variable. The results of this study also provide practical implications for managerial to develop product innovation plans by adding product variations and improving service quality in order to increase buying interest and consumer satisfaction.

IV. CONCLUSION

Based on the results of the study it can be concluded that there is a simultaneous significant effect of product variation and service quality variables on customer satisfaction. In other words, if there are more product variations and better service quality, then customer satisfaction will increase and vice versa. This means that the more product variations increase customer satisfaction and vice versa, assuming service quality does not change. The value of the service quality variable has significance This can be interpreted if the quality of service increases then customer satisfaction will increase assuming constant product variation. The results of the study also provide theoretical implications so that they can be used as a reference source for further researchers. This research is limited to the use of two variables independent so that in the research model for researchers can then develop a research model by adding variables other independent y or add moderating and mediating variables.

REFERENCES

- Alshurideh, M. T. (2016). Exploring the Main Factors Affecting Consumer Choice of Mobile Phone Service Provider Contracts. *International Journal of Communications, Network and System Sciences*, 9(12), 563–581. <https://doi.org/10.4236/IJCNS.2016.912044>
- Brady, M. K., & Cronin, J. J. (2001). Some new thoughts on conceptualizing perceived service quality: A hierarchical approach. *Journal of Marketing*, 65(3), 34–49. <https://doi.org/10.1509/JMKG.65.3.34.18334>
- Daryanto, & Setyobudi, I. (2014). *Konsumen dan pelayanan prima*. Gava Media. <https://www.onesearch.id/Record/IOS4644.slims-59975>

- Dwiastuti, R., Shinta, A., & Isaskar, R. (2012). *Ilmu Perilaku Konsumen* (1st ed.). UB Press. <http://shinta.lecture.ub.ac.id/files/2012/10/PERILAKU-KONSUMEN.pdf>
- Ekowati, S., Finthariasari, M., & Aslim, A. (2020). Pengaruh Harga dan Promosi Terhadap Keputusan Pembelian Produk pada Eleven Cafe Bengkulu. *Jurnal Ilmiah Akuntansi, Manajemen Dan Ekonomi Islam (JAM-EKIS)*, 3(1). <https://doi.org/10.36085/JAM-EKIS.V3I1.555>
- ELSamen, A. A., & Alshurideh, M. (2012). The Impact of Internal Marketing on Internal Service Quality: A Case Study in a Jordanian Pharmaceutical Company. *International Journal of Business and Management*, 7(19), 84–95. <https://doi.org/10.5539/IJBM.V7N19P84>
- Ghozali, I. (2017). Konsep Aplikasi Dengan Program Amos 24 Update Bayesian SEM. In *Model Persamaan Struktural: (7th ed., p. 392 pages)*. Badan Penerbit UNDIP. https://opac-perpustakaan.ummi.ac.id/index.php?p=show_detail&id=11114&keywords=
- Groover, M. P. (2010). *Fundamental of Modern Manufacturing: Materials, Processes, and Systems* (4th ed.). John Wiley & Sons. https://www.fcusd.org/cms/lib/CA01001934/Centricity/Domain/4529/Fundamentals_of_Modern_Manufacturing_Materials_Processes_and_Systems_4th_Edition.pdf
- Kotler, P., & Keller, K. L. (2013). *Manajemen Pemasaran* (13th ed.). Erlangga. <https://opac.perpusnas.go.id/DetailOpac.aspx?id=946875>
- Lupiyoadi, R., & Hamdani, D. A. (2011). *Manajemen Pemasaran Jasa* (2nd ed.). Salemba Empat. <https://opac.perpusnas.go.id/DetailOpac.aspx?id=918109>
- Moenir, H. A. . (2015). *Manajemen Pelayanan Umum di Indonesia*. Bumi Aksara. <https://onesearch.id/Record/IOS4965.022144#details>
- Parasuraman, A. P., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple- Item Scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1), 12–40. https://www.researchgate.net/publication/225083802_SERVQUAL_A_multiple-Item_Scale_for_measuring_consumer_perceptions_of_service_quality
- Sudaryono. (2016). *Manajemen Pemasaran: Teori dan Implementasi*. Andi Yogyakarta. <http://ailis.lib.unair.ac.id/opac/detail-opac?id=97139>
- Tjiptono, F. (2012). *Service Management: Mewujudkan Layanan Prima*. Andi Yogyakarta. <https://elibrary.bsi.ac.id/readbook/202276/service-management-mewujudkan-layanan-prima>
- Turki Alshurideh, M., Monin Shaltoni, A., Hijawi, S., & Turki Alshurideh, M. (2014). Marketing Communications Role in Shaping Consumer Awareness of Cause-Related Marketing Campaigns. *International Journal of Marketing Studies*, 6(2), p163. <https://doi.org/10.5539/IJMS.V6N2P163>
- Vilares, M. J., & Coelho, P. S. (2003). The employee-customer satisfaction chain in the ECSI model. *European Journal of Marketing*, 37(11/12), 1703–1722. <https://doi.org/10.1108/03090560310495429>
- Yuwono, H., & Yuwana, S. (2017). Pengaruh Kualitas Pelayanan Dan Keragaman Produk Terhadap Kepuasan Konsumen Pada Toko King Di Malang. *JEM17: Jurnal Ekonomi Manajemen*, 2(1), 331–346. <https://doi.org/10.30996/JEM17.V2I1.1195>